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The travels of Joseph Beal Steere in Brazil, Peru and Ecuador (1870-1873)

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ABSTRACT

Joseph Beal Steere (1842-1940) was sent by the University of Michigan in a trip around the world, from 1870 (September) to 1875, to collect materials in all departments of natural and human sciences for the University's Museum. He went from New York to Brazil (São Luís, Maranhão), proceeding up the Amazon, and spent about eighteen months on that river and some of its tributaries. Arrived at the head of navigation of the Amazon, at the mouth of the Río Santiago (Peru), he floated back two hundred miles on a raft, to reach the mouth of the Huallaga. He ascended this river to Yurimaguas, going thence across the Andes. He made part of the journey on foot and horseback; on the way he spent some time in the old cities of Moyobamba, Chachapoyas and Cajamarca. He struck the sea-coast at a town called Huanchaco, near the city of Trujillo; thence he went to Lima; and from there to Guayaquil; and thence, overland, to Quito, continually adding to his store of specimens. While at Quito, he ascended the volcano Pichincha and went to the bottom of the crater. He returned from Quito to Lima and made an excursion along the coast of Peru, collecting old Peruvian pottery from graves, etc. From Lima he went to Cerro de Pasco mining regions, making collections of minerals. Returning to Lima, he crossed the Pacific in a ship bound for Macao, China. From Macao he jouneyed successively to Hong Kong and Canton; from Canton to the Island of Formosa, where he spent six or eight months making journeys among the savages of the interior. From Formosa he went, via Hong Kong and Canton, to the Philippine Islands, and spent ten months there; he visited several places never before visited by naturalists, and found forty new species of birds. From the Philippines he went to Singapore, thence to Malacca, and made a trip through the Dutch Moluccas, touching at several places in the islands of Java, Macassar, Amboina and Ternate. From these islands he returned to Singapore, and from there, via Suez Canal and the Mediterranean, to Marseilles, stopping at Naples. He went through France by rail and via London and Liverpool went home, after an absence of little more than

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three years. Periodically he wrote letters telling of his adventures and impressions, with notes on the regions visited, to a weekly magazine edited in Ann Arbor, the **Peninsular Courier and Family Visitant**, where they were published. The 62 letters written by Steere in South America (Brazil, Peru and Ecuador) are here transcribed and commented.

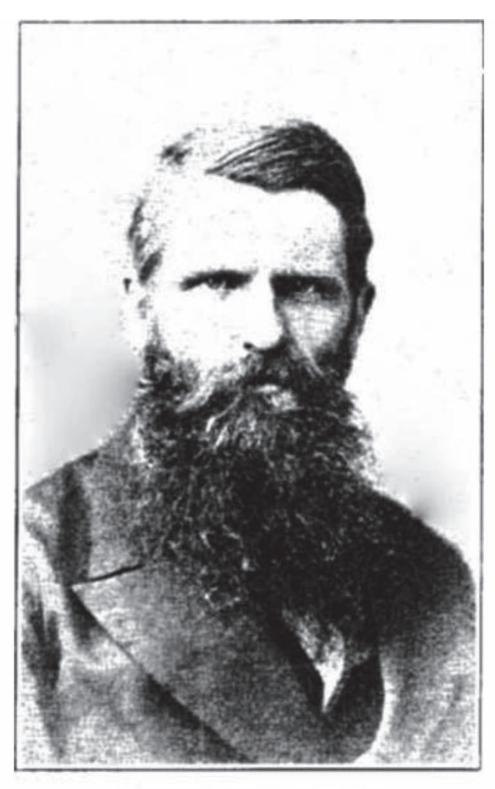
KEY-WORDS: Joseph Beal Steere; Travels; Brazilian Amazonia; Peru; Ecuador; Letters.

BIOGRAPHIC DATA

Joseph Beal Steere [Figs. 1, 2] (Anon., 1943: 1175; Barnard, 1878: 70-71; Marquis, 1918: 2574; Shavit, 1990: 466) was born in Rollin, Lenawee County, Michigan, on February 9, 1842, the son of William Millhouse Steere, of Quaker ancestry, originally from Ohio, and Elizabeth (Beal) Steere, of New England descent. Steere's early education was obtained in the common schools and in life in a farm. He finished his preparation for college at Ann Arbor High School and entered the literary department of the University of Michigan in 1864. He was graduated from that department in 1868, having made a special study of natural history. He took the law course in 1868-1870 and was graduated from the law school in the latter year. Immediately afterwards he started on a tour, in the interest of the University, to make collections for the departments of zoology and botany. He went from New York to Brazil, proceeding up the Amazon, and spent about eighteen months on that river and is tributaries. He shipped his collections down the river to the American Consul at Belém, who sent them home. Arrived at the head of navigation of the Amazon, at the mouth of the Río Santiago, he floated back two hundred miles on a raft, to reach the mouth of the Huallaga. He ascended this river to Yurimaguas, going thence across the Andes. He made part of the journey on foot and horseback; on the way he spent some time in the old cities of Moyobamba, Chachapoyas and Cajamarca. He struck the sea-coast at a town called Huanchaco, near the old city Trujillo; thence he went to Lima; and from there to Guayaquil; and thence, overland, to Quito, continually adding to his store of specimens. While at Quito, he ascended the volcano of Pichincha and went to the bottom of the crater. He returned from Quito to Lima and made an excursion along the coast of Peru, collecting old Peruvian pottery from graves, etc. From Lima he went to Cerro de Pasco mining regions, making collections of minerals. Returning to Lima, he crossed the Pacific in a ship engaged in the coolie trade going for a cargo in Macao, China. He made the voyage of eleven thousand miles in seventy-two days.

From Macao he jouneyed successively to Hong Kong and Canton; from Canton to the Island of Formosa, where he spent six or eight months making journeys among the savages of the interior. While there, he found manuscripts preserved among the aborigines, which he concluded to be relics of the Dutch mission established there two hundred and fifty years before. From Formosa he went, via Hong Kong and Canton, to the Philippine Islands, and spent ten months there; he visited several places never before visited by naturalists, and found forty new specimens of birds, which are now in the Collection of the University. He contracted in those islands the malignant fever so prevalent there; but found time to make large collections of insects and shells, corals, etc. From the Philippines he went to Singapore, thence to Malacca, and made a trip through the Dutch Moluccas, touching at several places in the islands of Java, Macassar, Amboina and Ternate; at the latter place he ascended the volcano of that name. In the Moluccas he made a large collection of the birds-of-paradise. From these islands he returned to Singapore, and from there, via Suez Canal and the Mediterranean, to Marseilles, stopping at Naples. He went through France by rail and via London and Liverpool went home, after an absence of little more than three years. This was in 1875.

An account of this great expedition and other further expeditions made by Steere was published by Frederick M. Gaige in 1932 (Michigan Alumnus 38(18):344-346, 352-353, and in *The Ark* (University of Michigan Museum of Zoology) 10(5):2-7), based on a collection of 96 letters written by Steere during his voyages and travels and published in the Peninsular Courier and Family Visitant, a weekly magazine edited at Ann Arbor, during the years 1870 to 1875. The notice published by Gaige (1932) gives a chronological list of the localities visited by Steere in his great expedition, so far as it could be determined at that time. In his Annual Report of the Museum of Zoology for 1918-1919 Alexander G. Ruthven published a portrait of Steere and gave a not-quite complete list of his publications. The same portrait and a photograph of a bas-relief sculptured head of Steere appear in Gaige's account [Hubbell, 1964].



JOSEPH BEAL STEERE (1879)



FIGURE 2: Joseph Beel Steere (center) with University of Michigan students, 1887 trip to the Philippines.

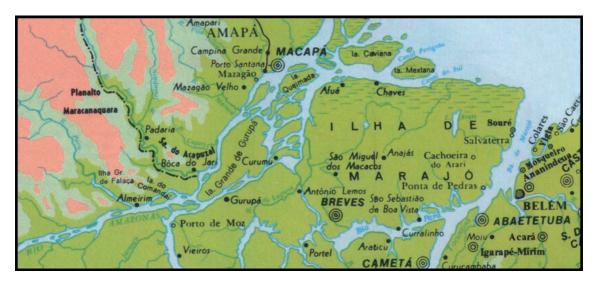


FIGURE 3: Ilha de Marajó and neighboring area, with some of the localities visited by Steere.

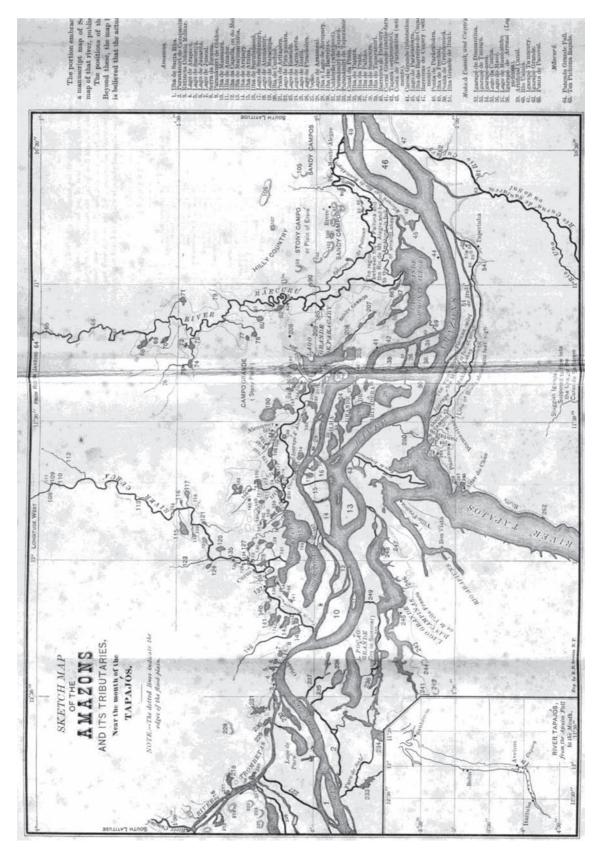


FIGURA 4: Middle Amazon River, showing location of Fazenda Taperinha, Panema and Diamantina (after Smith, 1879).

Some idea of the importance of the collections made by Steere may be gathered from the following rough estimate. There are three thousand birds [Sclater & Salvin (1878) published a paper on the birds collected by Steere in South America; cf. below, Appendix II; Brodkorb (1937) those collected by Steere in the Caviana and Marajó islands; see Appendix III below]; one hundred thousand sea-shells; twelve thousand insects; one thousand corals; three hundred fishes; two hundred reptiles; five hundred crustaceans; five hundred specimens of ancient and modern pottery; a small collections of Chinese bronzes; a collection of arms, clothing and implements; a collection of plants and woods; a collection of fossils; a large collection of ores and rocks; a collection of photographs; a collection of pith paper pictures from China. Steere discovered forty new species of birds in the Philippines.

On his return, he found the Regents had conferred him the degree of Ph. D. Soon after, he accepted the position of instructor in Zoology; and in 1876 was made assistant Professor in that department. In the summer of 1876 he made a trip to England for the study of collections in the British Museum. He was promoted to full professorship in 1879, remaining in that position until 1893. During this period

he led several groups of students into excursions in the Amazon (in 1879 he revisited Marajó island; cf. Brodkorb, 1937: 6).

He married Helen Buzzard on 30 September 1879.

Leaving Michigan University in 1893 he dedicated himself to agricultural pursuits. A last trip to the Amazon, accompanied by students, was undertaken in 1901, ir order to collect specimens for the Smithsonian Institution. Eigenmann & Bean (1907) [See Appendix I below] published on the fishes collected by him on that occasion, dedicating to him the species *Taeniosoma steerei* (Siluriformes, Pimelodidae), now a junior synonym of *Goslinea platynema* (Boulenger, 1888).

Steere died in his home at Ann Arbor, Micghigan, on 7 December 1940, at the age of 98.

Steere's itinerary in South America (1870-1873)

Hubbell [1964] compiled the data of Steere's expedition, transcribed below, to which we add some corrections and additions. [Within square brackets

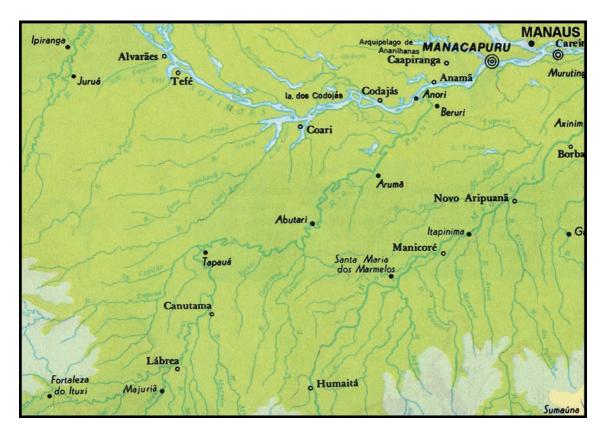


FIGURE 5: The Purus River, with some of the localities visited by Steere.

are cited the volumes, fascicles and dates of the *Peninsular Courier and Family Visitant*, where his letters were published].

1870

September

20: Sailed from New York; 40 day passage outside of Bermuda and West Indies, 30 days out of sight of land.

October

- 30: Letter I, São Luís, Maranhão [9(53), Dec. 30, 1870]. Arrives at São Luís do Maranhão.
- 31: Letter I, São Luís, Maranhão [9(53), Dec. 30, 1870]. Account of voyage.

November

- 16: Letter II, São Luís. Maranhão [10(1), 6 Jan., 1871]. Account of São Luís.
- 17: Left São Luís for Belém (Pará).

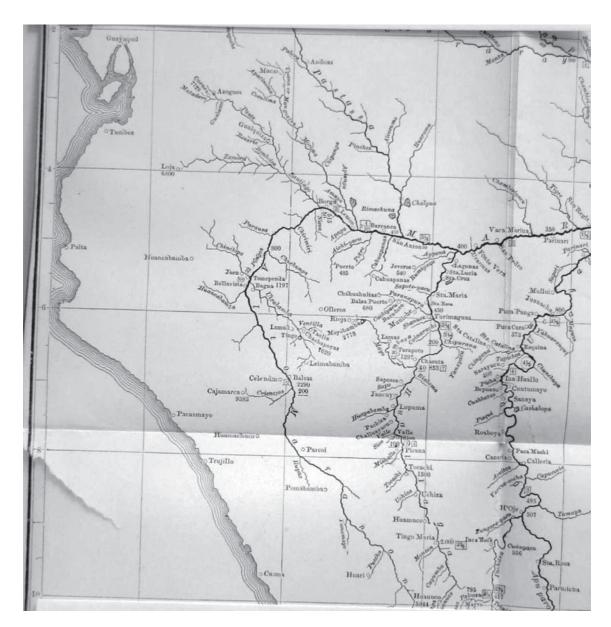


FIGURE 6: Map of Peru [part] (after Orton, 1876).

- 24: Letter III, Belém [10(2), Jan. 13, 1871]. Arr. at Belém. Establishing his base in Belém, makes several excursions in the neighborhood of the city, Nov. 24, 1870 to June 11, 1871).
- 25: Letter III, Belém [10(2), Jan. 13, 1871]. Work done in São Luís.

December

- 8: Letter IV, Belém [10(3), Jan. 20, 1871]. Descr. of Belém and surroundings; has made various trips up and down river in past two weeks; work.
- 18: Letter V, Belém [10(4), Jan. 28, 1871]. Further descr. of Belém; spent last week in long trips into surrounding country, all much the same.
- First shipment of specimens to Ann Arbor, via New York.
- 23: Left Belém for Vigia.
- 24: Letter VI, Vigia [10(6), Feb. 10, 1871]. Arr. today; descr. of Pará river.

1871

January

- 5: LeftVigia, arr. in Belém.
- 6: Letter VII, Belém [10(7), Feb. 17, 1871]. Descr. of Vigia and trip back.
- 16: Left Belém by boat for Chaves and ilha Caviana; 4 days passage around (westward of) Marajó

- island (also called *Joannes* at that time); third morning crossed 15-mile wide mouth of Amazon, stopped briefly at Macapá (State of Amapá); reached Chaves (Marajó Island) at night.
- 20: Letter VIII, Chaves [10(12), March 28, 1871]. Descr. of trip; plans. Left same day for Ilha Caviana, to stay at Fazenda Lionel.

February

- 1: Letter IX, Caviana [10(13), March 31, 1871]. Descr. ilhas Caviana, Marajó and Mexiana; nearly all *campo*; plans.
- 12: Letter X, Caviana [10(14), April 7, 1871]. Good collecting until winter rains set in Febr. 6; abandoned idea of crossing ilha Marajó; monkeys; birds make same sounds as related kinds in Michigan; life of fazenda owners like that of ancient Romans, living in cities with country estates; living condition and mores of people on estates; poor housing and poor food.
- 17: Left ilha Caviana for Belém; four days passage around Cabo Maguari (northeastern corner of Marajó island) and up river, by schooner.
- 20: Arr. in Belém.
- 25: Letter XI, Belém [10(15), April 14, 1871]. Descr. of return passage. Plans for visit to ilha de Marajó.

Note: In the *Courier* 10(16), April 21, 1871, Alexander Winchell published a letter commending the

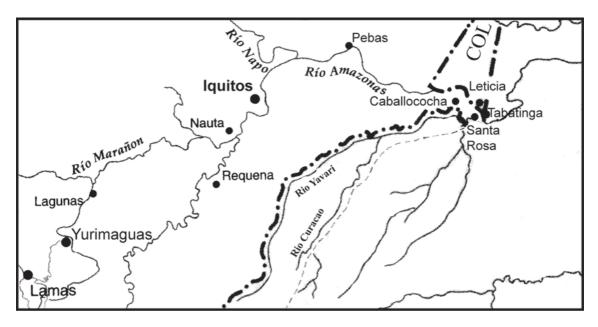


FIGURE 7: Steere traveled from Tabatinga to Lagunas along the rivers Amazonas and Marañón.

content and style of Steere's letters. Alexander Winchell (1824-1891) was for many years state geologist of Michigan and professor of geology and paleontology at the University of Michigan. He defined and first named Mississipian (Lower Carboniferous) strata along the upper part of the Mississippi river. Mt. Winchell in California was named after him. As a lecturer and writer Winchell did a great deal to reconcile the conflicts between science (particularly evolution) and religion; he embraced evolution as God's way of working out his purposes in the world.

March

- 10: Letter XII, Belém [10(17), April 28, 1871*]. Spent last three weeks preparing and packing collections from ilha de Caviana and getting ready to go up Amazon.
- 24: Left Belém for Soure, on SE side of ilha de Marajó; spent 8 days there.
- * In this issue of the *Courier* a comment quoted from the *Detroit Post* on the wide attention attracted by the Steere letters.



FIGURE 8: Steere's itinerary in Peru, from Lagunas to Puerto Chicama.



FIGURE 9: Northern coast of Peru and coast of Ecuador.

April

- 2: Returned to Belém from Soure.
- Letter XIII, Belém [10(18), May 5, 1871]. Descr. of country around Soure, and collecting trips in vicinity; plans to visit Indian mounds in interior of island.
- 17: Small schooner from Belém to rio Arari (SE side of ilha de Marajó); stayed at McGee farm on lower river Arari.

May

- 1: Letter XIV, rio Arari [10(15), June 23, 1871]. Came here few days after Easter; waiting for boat up river to Cachoeira do Arari; descr. of country and customs of people.
- 3: Arr. at Cachoeira do Arari.
- 6-7: Canoe trip to island in flooded campo near Cachoeira do Arari and return.
- 10: Letter XV, Cachoeira do Arari [10(16), June 30, 1871]. Descr. of town, region, people, collecting trips in vicinity.
- 12: Went to Fazenda Tojal [belonging to Benedicto da Silva Frade] near Cachoeira do Arari for a few days hunting.
- 16: Left on four day trip to Indian mounds [tesos] on Lago Arari; reached state-owned Fazenda Arari after one and one-half days canoe travel; visited mounds on ilha Pacoval in lago Arari across from Fazenda Santo Inácio; returned to Fazenda Arari.
- 19: Returned to Cachoeira do Arari.
- Letter XVI, Cachoeira do Arari [10(27), May 27, 1871]. Descr. of fazendas, trip to ilha Pacoval, mounds and artifacts.
- 23: Returned to Fazenda Tojal for more collections.
- 26: Second trip to nearby Fazenda Curralinho, return to Tojal.
- 27: Second trip to Fazenda Curralinho, back to Cachoeira do Arari.
- 31: Down rio Arari by canoe and across to Pará.

June

- 1: Letter XVII, Belém [10(28), July 14, 1871]. Descr. previous week's activities; plans.
- 11: Boarded stremer for trip to Santarém.
- 12: Passed among islands in mouth of Tocantins river, stopped at Breves (SW angle of the ilha de Marajó); passed by the furo do Tajapuru.
- 13: Entered Amazon, stopped at Gurupá, night at Porto de Moz in the Xingu river.

- Got lost; reentered Amazon opposite Almeirim; descr.
- 17: Letter XVIII, Santarém [10(31), Aug. 4, 1871]. Descr. of trip to Santarém; set out for Fazenda Taperinha immediately.
- 18: Left for Fazenda Taperinha by boat, arrival next day; large sugar estate at foot of mountain or edge of tableland.
- 21-22: Visit to "black earths" on edge of Serra de Taperinha and return.
- 28: Letter XIX, Taperinha [10(32), Aug. 11 1871]. Descr. of trip to Taperinha, plantations, collections; was in Taperinha on 23rd.

July

- 18: Returned from Taperinha to Santarém.
- 19: Letter XX, Santarém [10(34), Aug. 15, 1871]. More observations on country and people; plans.
- 20: Left Santarém by steamer for trip to Óbidos.
- 22: Letter XXI, Óbidos [10(39), Sept. 29, 1871]. Descr. of trip up Amazon, varying nature of shores; Óbidos; collecting.
- Note: There is a discrepancy in dates given in Letters XX and XXI; latter says left Santarém for Óbidos on July 17.

August

- 1: Left Óbidos for trip up Amazon and rio Nhamundá to Faro (Pará, boundary with the state of Amazonas); spent several days here.
- 6: Left Faro by canoe, down the Nhamundá river.
- 7: Down Nhamundá, spent night at Lago Grande on way to Amazon.
- 8: Reached Amazon after dark, moored to floating vegetation raft, drifted.
- 9: Reached Óbidos in the morning.
- 10: Letter XXIII, Óbidos [10(41), Oct. 13, 1871]. Descr. of life of escaped slaves in their "mocambos" or places of refuge; descr. of Faro and trip there and back.
- 12-14: Made trips to the 100 ft. bluffs at Óbidos, and to Serra da Escama, a mountain just below Óbidos.
- 15: Letter XXII, Santarém [10(40), Oct. 6, 1871]. Inscribed boulders on Serra da Escama; news of death of original companion, Mr. Lyman, of yellow fever in Belém; plans for trip with Prof. Hartt to Monte Alegre.
- Note: This and the letter numbered XXII are in reversed sequence. The numbers were not assigned

- by Steere, but are merely installment numbers assigned by the *Courier*; long letters were sometimes broken into two or three numbered installments, and two letters were printed under the same number.
- 19: Boarded streamer at midnight for trip to Monte Alegre.
- 20: Arr. Monte Alegre in morning.
- 21: Started trip to Ererê by canoe; arr. that afternoon at the village, at the foot of Serra de Ererê, west of Monte Alegre [cf. map of H. H. Smith, Fig.].
- 22-27: Collecting around village of Ererê, on plain.
- 28: Trip to Serra de Ererê; stayed night in camp at foot of mountain.
- 29: Second trip to mountain; return to Ererê and to Monte Alegre.

September

- 1: Trip to "Mount Tajury" [Serra de Itauaiuri or Itauajuri], (west of Monte Alegre); spent night at rio Jacaré.
- 2: Climbed Serra de Itauajuri, spent night at village of "Sandoso" [?] 10-12 miles west of Monte Alegre.
- 3: Returned to Monte Alegre.
- 4: Letter XXVII, Monte Alegre [10(50), Dec. 15, 1871]. Descr. of trip to Ererê and Serra de Ererê; many caves, steep, level on top, 1000 ft. high. On the 4th took steamer to Santarém, arr. next day.
- 6: Letter XXV, Santarém [10(47), Nov. 25, 1871]. Descr. of trip to Serra de Itauajuri, 1200-1400 ft. high, plain on top.
- Note: Letters XXVII, XXVI and XXV are out of order as printed and there is no letter XXIV.
- 10-14: Visits to American confederates at Panema, across spurs of mountains back of Santarém, Diamantina [cf. map of H. H. Smith, Fig. 4] and return to Santarém.
- 15?: Letter XXVIII, Santarém [10(51), Dec. 22, 1871]. Descr. of American setllements at Panema and Diamantina; unreconciled Southern sympathizers; little success; hard life; description of country.
- Note: As printed, the date of this letter is given as Sept. 19; this is probably an error, as it described events after return from Monte Alegre, and Letter XXVI says left for Tapajós on Sept. 17.

- 17: Left Santarém by steamer for trip up Tapajós river.
- 18: In morning at Alter do Chão, near mouth of Tapajós river; voyage up Tapajós, stopping at villages on both sides.
- 19: Arr. at Itaituba, 200 miles mouth of Tapajós.
- 20: Trip down Tapajós; stopped at Urucurituba [left margin of Tapajós, opposite to Fordlândia].
- 21: Arr. at Santarém.
- 22: Left by steamer for Manaus.
- 23: Went ashore at Óbidos to pick up collections.
- 24-25: Passed Nhamundá river, stopped at Faro.
- 26: Arr. at Manaus in evening; could not land until next day.
- 27: Letter XXVI, Manaus [10(48), Dec. 1, de 1871]. Descr. of events since Sept. 17; lands along river Amazon; 2nd American Bolivian Expedition at Faro.

October

- 11: Left Manaus on trip up rio Purus; first day down to mouth of rio Negro; waited all night and next day for pilot.
- 13: Up the rio Solimões to Manacapuru, a little wooding-place; left at midnight.
- 14-17: Ran out of wood; spent four days reaching mouth of Purus River, got wood at Beruri, just above mouth of that river.
- 18-19: Up the Purus, aground each night.
- 20: Reached Itatuba, after passing Piranhas.
- 21: Arimã.
- 23: Canutama; mouth of Ituxi River.
- 25: Arr. at mouth of rio Ituxi, a tributary of the right margin of the Purus, after 15 days of travel from Manaus.
- 27: Letter XXIX, mouth of Ituxi River [11(6), Febr. 9, 1872, continued as Letter XXX ("XXVIX") [11(7), Febr. 16, 1872]. Descr. of trip up river; geology; people; towns; Indian tribes; most of surrounding country along the Purus is *várzea*, or land covered with water at flood.
- 30: Started up river to "Marrahan" [now Fortaleza do Ituxi], camping at night on *praias* (beaches).

November

1: Arrived Fortaleza do Ituxi, village situated at the right margin of the Purus, near the lake of Maraã, about 4 km (up the Purus) from the mouth of the river Mamoriá-mirim or Mamoriazinho, a tributary of the left margin of the Purus, and almost 60 km, in a straight line, SW of the modern Lábrea.

- 10: Letter XXXI, "Marrahan [Fortaleza do Ituxi)" [11(8), Feb. 23, 1872]. Trip up Purus by canoe; camped on *praias;* met Mr. Piper, head of the illfated Bolivian Expedition to gold mines.
- 11-14: Trip by canoe in search of wild Indian tribes [Cf. Steere, 1903, 1949]; to Paumari Indians village on long lake (former bed of Purus), camped at mouth of Mamoriá river (or Mamoriá-Grande), a tributary of the left margin of the Purus; next day up Mamoriá river looking for Yamamadi ("Jamamagy") Indians, not found, returned to lake; returned to Fortaleza do Ituxi.
- 15: Letter XXXII, "Marrahan [Fortaleza do Ituxi]" [11(9), March 1, 1872]. About rubber, sarsaparilla, turtle butter, seen on way up from Ituxi.
- 17: Letter XXXIII, "Marrahan [Fortaleza do Ituxi]" [11(10), March 8, 1872]. Descr. of trip up lake and rio Mamoriá looking for Indians; plans.
- 18: By canoe down to Utari on Purus, where high land reaches river.
- 19: Down Purus to Lábrea belonging to Colonel Labre; spent several days here, collecting.
- 23: Left Lábrea by steamer for Manaus.
- 29: Arrived Manaus.
- 30: Letter XXXIV, Manaus [11(11), March 15, 1872]. Descr. recent events.

December

- 1-10: Spent ten days packing and forwarding collections.
- 11: Left Manaus by steamer for trip on up Amazon; stopped once a day to "wood up"; passed Tefé, Fonte Boa, São Paulo de Olivença.
- 18: Arr. Tabatinga, Brazil, Amazonas, on Peruvian frontier.
- 19: Arr. Loreto; transferred to another steamer.
- 21: Arr. Pebas (Loreto), for one month's stay.
- 23: Letter XXXV, Pebas [11(13), March 29, 1872]. Descr. of trip up Solimões from Manaus to Pebas.

1872

PERU

January

15: Letter XXXVI, Pebas [11(17), April 26, 1872], concluded [11(18)" May 3]. Descr. of life in Pebas; most of time here spent collecting fossils; Pebas located on Ampiyacu river about a mile about jct. with Amazon; comments on languag-

- es of Peruvian Indians, which he finds more difficult than those of Brazilian Indians.
- 25: Letter XXXVII, Pebas [11(19), May 10, 1872]. Fossil collecting; mosquitoes; Peruvian traders; differences between Peruvians and Brazilians in energy and temperament; low state of Christianity; lack of marriage; *Victoria regia*; jaguar killing dogs in village.
- 26-27: Left Pebas by steamer for Iquitos; first night in mouth of Rio Napo
- 28-31: In Iquitos (Loreto). Packing collections and preparing for trip across mountains.
- Note: The next six letters, though numbered in proper sequence (XXXVIII-XLIII) in terms of the events described, are evidently in part misdated, either by Steere or more probably by the Courier. Calculation of the distances traveled by steam, canoe and raft, and durations of stay at various places mentioned by the letters, have led to the following chronological placement: Letter XXX-VIII, Yurimaguas, dated Feb. 25, should be Feb. 15; Letter XXXIX, Borja, dated Feb. 29, should be Feb. 19 Letter XL, Barrancas, dated Feb. 25 correctly; Letter XLI, Lagunas, dated Mar. 1, correctly; Letter XLII, Yurimaguas, dated Mar. 6, Yurimaguas (second visit), was probably begun on the boat before arrival at Yurimaguas, since it states that Yurimaguas was reached Mar. 7; Letter XLIII, Shanusi, dated Mar. 18, should be Mar. 28. These dates have been used in calculating the intercalated dates.

February

- 1-6: From Iquitos by steamer up Amazon and into Marañón at jct. with Ucayali
- 7: One day around at mouth of Río Huallaga.
- 8-13: Six days up Río Huallaga to Yurimaguas.
- 15?: Letter XXXVIII, Yurimaguas [dated Feb. 25; see note above] [11(20), May 17, 1872]. Descr. of Iquitos; factories to supply steamers, run by Englishmen and equipped with English machinery; immorality of priests and need for good teetotaler Protestant missionaries; Confederate Navy officers mapping upper Amazon and tributaries; descr. of trip to Yurimaguas; many stops at Indian villages, etc.
- 17-18: Steamer down Huallaga and up Marañón to Borja, arriving late second day; ashore next morning (19th).
- 19?: Letter XXXIX. Borja [11(22). May 31, 1872]. Dated Feb. 29, but see note above. Descr. trip to

- Borja; day after arrival two members of steamer crew drowned when small boat was swamped on trip up to rapids of Pongo de Manseriche, where the Marañón breaks through the mountains.
- 21: Left Borja on balsa raft, camped on playa.
- 22: Arr. at Limón [Isla Limón on Marañón, Loreto]; stayed one day hunting.
- 24: By canoe down river to Barrancas [Isla de Barranca]; spent day after arrival hunting [Letter XLI] (Letter XL says "spent several days at Barrancas").
- 25: Letter XL, Barrancas [11(23), June 7, 1872]. Descr. of trip down Marañón from Borja; great fluctuations in river height; descr. of people of Limón and their customs; peccary hunt; collecting fossils and birds in hills around Barrancas; jigger fleas in feet; "spent several days climbing over hills and searching for fossils and game"
- 26: Canoe down Marañón to Aripari (2 hours), there hired new crew, passed San Antonio new mouth of Pastaza about noon, reached village of Cherui at midnight.
- 27: Continued down river, reached Isla Cedro before night, near mouth of Huallaga; engaged new crew.
- 28: Up Huallaga, camped on playa, landing place for Lagunas.
- 29: Walked 2 hours to Lagunas [Loreto].

March

- 1: Letter XLI Lagunas [11(24), June 14, 1872]. Descr. Barrancas; "spent day after arrival hunting, and next morning went down by Canoe" [compare with information in Letter XL]. Descr. of trip to Lagunas; around this village first good agricultural and cattle land seen.
- 2-5: In Lagunas
- 6: Left Lagunas by steamer for Yurimaguas; arrived on Mar. 7.
- 7: Letter XLII, Yurimaguas [Loreto] [11(25), June 21, 1872]. Letter dated March 6, but states arrived at Yurimaguas March 7. Descr. of people and customs at Lagunas; people afraid of Steere on account of his beard, which is a property of the devil; school, language, death customs, worship; first mail by steamer received in four months; plans for trip over Andes.
- 8-20: In Yurimaguas, sharing pottery made, studying language of Indians, packing collections.
- 21c: Left Yurimaguas by canoe few miles down Huallaga and then up Río Shanusi; night in plantation.

- 22c: On up Shanusi, spent night in *tambo* [hatched shack]; heard jaguar.
- 23c: On up Shanusi; men drank aguardiente with carbolic acid used for preserving specimens; waited day to see effects, then two days more to Shanusi.
- 26c: Arr. Shanusi in San Martín
- 28?: Letter XLIII. Shanusi [11(26), June 28, 1872]. Dated March 8; see note on previous page. Descr. Yurimaguas, head of navigation and beginning of overland trip to Pacific Coast; French colony; to get pottery had to order it made and wait for it; difficulties in studying Indian languages of the area; descr. of trip to Shanusi

April

- 5: Letter XLIV Shanusi [11(27), July 5, 1872], and Letter XLV, continuation [11(28) July 12, 1872]. Full descr. of Shanusi, a village of 150 inhabitants; the celebration of *Semana Santa*, dancing, feast, *penitentes*, etc.
- 7: Left Shanusi for trip over Andes, starting on foot with boys carrying 50 lb. loads; hunted ahead; night alone in *tambo*.
- 8: Trail to San Juan Loma at foot of mountains, stayed night.
- 9: Trail up mountains, night in tambo.
- 10: Trail over ridge, past three peaks, from dripping cloud forest to dry west slope, reached village of Cumbasa on Cumbasa River, to Tarapoto after dark.
- 12: Letter XLVI, Tarapoto [San Martín] [11(35), Aug. 3, 1872].
- 13-17c: Several days at Tarapoto observing life of village and resting.
- 18-21c: Trip to Juan Guerra, two leagues from Tarapoto at jct. of Río Huallaga and Río Mayo, to collect fossils.
- 26: Letter XLVII, Tarapoto [11(36), Sept. 6, 1872]. Descr. Tarapoto, a mud town of 2-3000 inhabitants near jct. Ríos Mayo and Huallaga; climate, agriculture, food, disease, sugar, *aguardiente*, trips.
- 26: Left with mule for Moyabamba, night at Lamas, near Río Mayo but several hundred feet above it
- 27: Day at Lamas
- 28: Crossed Río Mayo, passed Tobalosas, night in *tambo* on plain
- 28: Rained all day; night in tambo.
- 30: Hard day trip in rain; saddle broke; night in *tambo*.

May

- 1: Arrived at Moyobamba [San Martín]
- 2: Letter XLVIII, Moyobamba [11(37), Sept. 13, 1872]. Tarapoto to Moyobamba looks short distance on map, but took five days on mule; descr. of journey.
- 10: Letter XLIX, Moyobamba [11(39), Sept. 27, 1872]. Descr. of Moyobamba, good climate, on plain 200-300 ft. above Río Mayo; methods of house-building; hat-making; balls and dancing; absence of marriage; hard lot of children.
- 22: Left Moyobamba and arrive at Rioja [San Martín]; found feast in progress, could not proceed.
- 23: [Collected; visited warm springs]

June

- 4: Stuck in Rioja on account of feast and inability to get transport; got tired of waiting, and
- 5: started on foot for Chachapoyas with peon; night in *tambo* at food of mountains.
- 6: Climbed mountain on deeply trenched path [cajón], camped on ridge.
- 7: Descended to valley and spent night in place called Uscho [or Uschoo] (the hole, in Indian) in tambo.
- 8-10: Remained at Uscho [or Uschco], collecting
- 11: Moved on up valley, camp in tambo.
- 12: Over ridge, night in *tambo* at Almirante at foot of high mountain range.
- 13: In rain over the summit, down to valley and night in *tambo*.
- 14: To village of Molinapampa and Taulia; stayed one day.
- 15-16: Reached Chachapoyas [Amazonas]. [Stayed here, with side trips, until July 9].
- 26: Letter L, Chachapoyas [11(42), Oct. 18, 1872]; Letter LI, continuation [11(43), Oct. 25, 1872] Descr. of trip over Andes to Chachapoyas; descr. of life at Taulia; dancing; customs; center of carrying trade over mountains between Moyobamba and Chachapoyas; at boundary between rainy and dry belts; descr. Chachapoyas, 8000 people, on high barren dissected plain (9000 ft. elev.), supported by government funds; if guano income failed would fall to pieces; cockfighting; trade in market, and "marrying a scarce article to an abundant one."

July

3: Six day trip to Kuélap (2 days ride up Utcubamba River valley).

- 6: Letter LII, Chachapoyas [11(44), Nov. 1, 1872]. Descr. of trip to Kuélap; first night at "old man's house", *garrapatas* (ticks); towers and terraces on mountainsides; second night at hacienda at foot of mountain; visit to "fortress" of Kuélap, descr.; night at hacienda; ruins on another side of mountain next day, shot condor, night at hacienda; next day to "old man's house", following day to large bat cave and back to Chachapoyas.
- 8: Left Chachapoyas with mule; first night on bare hillside.
- 19-12: Up the Utcubamba river valley.
- 12: Crossed river and followed deep shaded valley upward.
- 13: To foot of second great range of Andes.
- 14: Over Callacalla summit (c. 14,000 ft.), down to within sight of Balsas and Marañón.
- 15: Down within a few miles of Balsas [just over boundary in Cajamarca, on Marañón].
- 16: To Balsas, crossed river, night near Celendín [Cajamarca].
- 17: Arr. Celendín; stayed day.
- 18: Down valley past Huánuco, up onto high plains and ridges, night at hut in small valley.
- 19: Over another mountain range to Cajamarca.
- 20: Letter LIII, Cajamarca [11(45), Nov. 8, 1872]. Descr. of trip from Chachapoyas; now at Hacienda Tartar. [From next letter: did not intend to stop here, but decided to wait out revolution expected about August 1 in Lima]
- 24: Returned to Celendín, one day journey, arrived next morning.
- 25-26: In Celendín; town deserted, people had just stoned subprefect to death, afraid of reprisals.
- 27: Celendín; news of revolution; people returned, parade and bull-fight.
- 28: Returned to Cajamarca.

August

14: Letter LIV, Cajamarca [11(46), Nov. 15, 1872]. Decided to wait until expected political troubles were over; trip to Celendín and events there; few days heard of revolution in Lima and assassination of President Balta and the brothers Gutiérrez; descr. of Cajamarca; customs, ruins, pottery, hot baths, Indians, crops, cultivation, trumpets.

September

3: Left Cajamarca for Callao; over ridge to valley of Magdalena river, crossed river, up to *tambo* on ridge for the night.

- 4: Reached Contumana [Cajamarca]
- 5: Reached Cascas after day in mountains [Cajamarca]
- 6: Left Cascas at midnight, crossed last low range of mountains, two hours on plain to Ascope [La Libertad]
- 7: One day in Ascope.
- 8: Passed estate of Tascala (sugar) and went on to Paiján [La Libertad] for the night.
- 9: Through remains of pre-Inca towns, reached Malabrigo [now Puerto Chicama] on coast at noon.
- 10: Boarded steamer for trip down coast to Callao.
- 12: Arrived at Callao.
- 14?: Letter LV, Callao [11(48), Nov. 29, 1872].
- Note: This letter, as published, is dated Aug. 14, the same date as Letter LIV from Cajamarca; the date here assigned fits internal evidence in the letters and the geographic requirements.
- Letter LVI, Callao [11(50), Dec. 13, 1872]. Descr. Callao and Lima

October

- 1: Letter LVII, Callao [11(51), Dec. 20, 1872]. Descr. Peruvian "International Exposition" at Lima; has made several short trips, to Ancón (2 or 3 days?), north to Lima; to Isla San Lorenzo, 3-5 miles from Callao. On this date left by steamer for Pacasmayo, but stopped at Isla Macabí and decided to stay a few days on this guano island.
- 4-8: On Isla Macabí [near Puerto Chicama, Libertad, about 290 miles north of Callao].
- 9: By steamer one day to Pacasmayo [La Libertad].
- 10-26: Working in and out from Pacasmayo, buying pottery at Pacasmayo, Chebán and San José; several trips along railroad running up valley toward Cajamarca to railhead at Pai Pai and by horse 20 miles more to Galliaretas.
- 27: Boarded steamer at Pacasmayo for four day trip to Callao.
- 30: Arrived at Callao.

November

1: Letter LVIII, Callao [11(52), Dec. 27, 1872]. Descr. of Isla Macabí, guano industry, mummified birds and seals in guano, seal dung main source; landing through breakers at Pacasmayo, collecting ancient Peruvian pottery in vicinity of Pacasmayo, also mummies, descr. of trips on railroad, inscribed rocks at Galliaretas.

- 2-24: At Callao, packing materials and preparing for trip to northern Peru and Ecuador.
- 15: Left Callao by steamer for north.
- 17: Went ashore at Puerto Casma [Ancash, 187 miles north of Callao].
- 19: Landed at Huanchaco, port of Trujillo [La Libertad]; went to Trujillo.
- 20: Spent one day in ruins near Trujillo.
- 21: Returned to Huanchaco.
- 23: "Took next steamer for Pacasmayo" [one day trip].
- 24: "Next morning took sailing ship for Tumbes" (four days sail).
- 27: Reached mouth of Tumbes river [Tumbes]; to Tumbes, 2 miles inland

28: December

- 2: At Tumbes, hunting.
- 3-7: Trip southwest along coast to Zorritos; a couple of days hunting on hills, along coast, then returned to Tumbes.
- 10: Letter LIX, Tumbes [12(8), Feb. 21, 1873]. Descr. of Trujillo and pre-Inca ruins there, as large as New York; Inca road to coast younger than ruins; descr. of Tumbes, petroleum wells and refinery, trip to Zorritos and wells, passing Corrales (supposed site of Pizarro's landing), descr. of region.
- 18-20: Up coast to Punta Jambali, collecting shells; two nights on beach; return to Tumbes.
- 23: Left Tumbes with horses and mules; reached Arenillas in Ecuador [just across boundary]

ECUADOR

- 2: Reached Santa Rosa; several days hunting.
- 28-31: Trip to Biron (hacienda), 12-15 miles up river at foot of mountains; returned to Santa Rosa.

1873

January

- 1-9: Remained at Santa Rosa; took ship to Guayaquil on Jan. 9.
- 11: Reached Guayaquil.
- 17: Letter LX, Guayaquil [12(9), Feb. 28, 1873]. Descr. of region around Tumbes; collecting; trip to Santa Rosa; Christmas celebrations, singing; government; currency; poisoning

- stream for fishes at Biron; rubber tree and rubber collection, not as in Brazil; passage to Guayaquil.
- 18: Took boat up river, beginning of trip to Quito.
- 19: Arrived at Bodegas, or Baboya, port for Quito in dry season
- 20: With mules for Savaneta, 15 miles above.
- 21: Ascended valley, camped at night.
- 22: Climbed all day in rain, reached village of Camino Real.
- 23: Reached Guaranda, near foot of Chimborazo.
- 24-25: Waiting for mules in Guaranda.
- 26: Rode around east side of Chimborazo, passing through *páramo*, the Arenal (sand plain on slope of volcano, road here reached nearly 16,000 ft. elevation), again *páramo*; nearly fifty miles on mule-back this day, camped in hut (passed Mocha in dark).
- 27: Rode back to Mocha, then on to Ambato.
- 28: Ambato to Latacunga.
- To Machacha, passing between Volcán Cotopaxi and the Illinini.
- 30: Reached Quito, leading horse the last two leagues.

February

- 1: Letter LX bis, Quito [12(18), May 2, 1873]; Letter XLI (continuation) [12(19), May 9, 1873]. Descr. of Guayaquil buildings, streets, soldiers, trade, old earthworks, climate, etc.; descr. of trip to Quito; country, fair at Latacunga.
- 6-8: Trip from Quito to Volcán Pichincha, ascent, return to Quito.
- 15: Letter LXII, Quito [12(22), May 30, 1873]. Descr. of Quito; Jesuit college museum of natural history; visit to Pichincha, descending into crater; return to Quito.
- 16: Left Quito with mules for Guayaquil,
- 17: Reached Ambato.
- 18: Spent night in a *tambo* at Chuquipaqui at base of Volcan Chimborazo.
- 19: Reached Guaranda.
- 20-22: Held up in Guaranda by fiesta.
- 23: Left Guaranda with mules; four days through mountains to Savaneta.
- 26: Arrived at Savaneta and took canoe to Bodegas.
- 27: Arrived at Guayaquil.

March

4: Steamer from Guayaquil to Callao (estimated duration of voyage six days).

- 5-18: In Callao, packing and shipping collections.
- 19: Letter LXIII, Callao [12(23), June 6, 1873]. Painters of Quito; trip back to Guayaquil and Callao; now in old room, surrounded by shells from Tumbes, fish and monkeys from Santa Rosa, birds and plants from Quito, and geological specimens from Chimborazo and Copopaxi.
- 24: Trip up Oroya Railroad; to Chosica.
- 25-28: Several days at Chosica, examining ruins of pre-Inca city and excavating grave-pits under floors of rooms.
- 29: By horse down valley a few miles to another ancient ruined town.
- 30: On up the railroad to San Bartolomé, Verrugas bridge, and Surco at present railhead; by mule to Matucana.
- 31: By mule to San Mateo, gorge of Infernillos, and stayed at summit headquarters of American railrod engineers.

April

- 1: In spite of soroche, to summit tunnel at 15,000 ft, and down to Pucará in headwaters of Ucayali drainage.
- 2: In Pucará, too sick to travel, but skinned vicuna.
- 3: Pucará; visited silver and lead mines.
- 4-6: Three days trip back to Lima.
- 7-14: In Lima, packing specimens; trips to ruins in plain where stand Lima, Callao, Chorillos.
- 15: Letter LXIV, Callao [12(39), Sept. 26, 1873]. Letter LXV (continuation) [12(40), Oct. 3, 1873]; Letter LXVI (continuation) [12(41), Oct. 10, 1873]. Description of trip up Oroya Railroad; ruined cities near Chosica; mummy burials; high state of ancient agricultures, with terraces, compared with present; attributes lack of energy and industry of people to guano income, which ruined Peru; ancient tools of cultivation (digging stick) still in use; geology of railroad route; fatalities in constructing Verrugas bridge from verrugas disease; soroche; mines; trip back to Lima.

May

- 4: Continued visits to ruined cities around Lima.
- 5-6: Trip by train to Chorillos, thence by horse to Pachacámac, about 30 miles S. of Lima, to visit the Temple of the Sun; spent night at *hacienda* in valley of Lurín.

10: Letter LXVII, Callao [12(42), Oct. 17, 1873]. Visits to mounds and ruins in vicinity of Lima; descr. of Pachacámac, ruined city and Temple of the Sun; mummies, aprons, pots; life of Chinese "slaves" on the *haciendas*.

May 22 to Aug. 2, 1873

Voyage to China.

DOCUMENTS

Note in the *Peninsular Courier and Family Visitant*, (September 9, 1870) announcing Steere's departure from Ann Arbor

JOSEPH BEAL STEERE, a graduate of/ the class of 1868, and of the law class of/ 1870, of the University, left this city on/ Monday evening for a three years' tour in/ Central America, Australia [sic], and the East Indies, under an engagement with the Uni-/versity to make and transmit collections of/ Natural History, Geology, or Antiquities,/ for the museum. He will probably return by way of China and Japan, thus making/ the circuit of the world. Mr. S. is a young/ man of ability and integrity aad [sic] will un-/doubtedly make some valuable collections/ for the University during his travels./

Steere's letter announcing his trip (*Peninsular Courier and Family Visitant*, September 1870)

CORRESPONDENCE

NEW YORK, September 16, 1870.

DEAR COURIER, – I sail to-morrow, in/ the schooner Francis G. Davis, for the/ ports of Maranam [sic] [São Luís, Maranhão] and Para [Belém], in Brazil. We shall likely reach Maranam [São Luís] in thirty/ days, and after unloading part of the cargo,/ will go to Para [Belém], where I shall likely have/ my headquarters for several weeks. I/ have spent part of my time, while waiting,/ in making a trip to Boston. I expected to/ see Prof. Agassiz and get letters from him/ to persons in Brazil. I did not find the/ Professor at home, but got a great deal of/ information in regard to the country, best/ places to collect in, methods of preserving/ specimens, etc., etc., froms Messrs. An-/thony and Allen,

who accompanied Prof./ Agassiz1 on his trip to the Amazon./

I don't like the appearance of New Eng-/land for farming purposes. I should think/ the Northern Peninsula of Michigan would/ be about as good, and we Wolverines² don't/ think that worth cultivating; but the/ Yankees are an enterprising set, and make/ up in manufactures what they lack in soil/ and climate. From what I saw of them I/ should suppose they had left the strict/ Puritanic principles of the forefathers a/ great way behind. I saw much more ca-/rousing and less church-going during the/ Sabbath I stopped at Fall River than I/ have been accustomed to see in Michigan./ I should think that Spiritualism, Mor-/ monism, and other isms of the same fam-/ily, found more supporters. I may be/ mistaken, but the people of the manufac-/turing towns - especially the women -/ seemed to me to have degenerated both in strength and good looks, and I thought I/ could distinguish the retreating fore-/head and chin, with prominent

jaws and/ teeth, that we so often see among the Irish/ and other nations who have suffered from/ hard work and poor fare for many generations./

Mr. Dills has had very poor health since/ we started from Ann Arbor, and has given/ up going to Brazil with me, but will sail in/ eight or ten days for Buenos Ayres./

I have bought a gun and some kinds of/ ammunition not to be procured on the/ Amazon, together with preservatives and/ other things too numerous to mention,/ which I expect to be of use when I get to/ work./

I shall long remember the kindness I/ received from the people of Ann Arbor,/ during my six years residence among them./ Write to me at Para, Brazil, care of the/ U. S. Consul. I will write as soon as I/ reach Brazil and get to work./

Yours, &c.,/

JOSEPH BEAL STEERE

Letter I [Peninsular Courier and Family Visitant, 9(53), December 30, 1870]

FOREIGN CORRESPONDENCE

Number I

MARANHAM [São Luís, Maranhão], BRAZIL, October 31, 1870.

We arrived at this port last night,/ after a passage of forty days in length/ – thirty-eight days out of sight of/ land. We sailed from New York on/ the 20th of September and lost sight/ of Sandy Hook and the low lands of/ Jersey that evening. We came in sight of Santa Anna Island and light/ house and the timbered country be-/yond, early yesterday morning. I/ was very glad to see land once more/ after having looked so long on leaden/ clouds above and leaden waves be-/neath./

Our course led us outside of the/ Bermudas and all the West Indian/ islands, and we were at one time/ almost as near the coast of Africa as/ to that of America./

My experience of sea life is very/ much like that of others who have/ gone to sea for the first time. I think/ we have had about the usual number/ of storms and squalls, and rather/ more than our share of calms and/ head winds. The most of the time/ during the voyage the weather was/ cloudy, but we had as few days of fine/ weather, with long lines of warm,/ fleecy clouds hanging along the hori-/zon; just such as we

[&]quot;In the winter of 1865 it became necessary for me, on account of some disturbance of my health, to seek a change of scene and climate, with rest from work... Toward Brazil I was drawn by a lifelong desire... as a mere vacation it had little charm for me. I could not forget that, had I only the necessary means, I might make collections on this journey which, whenever our building could be so enlarged as to give room for their exhibition, would place the Museum in Cambridge [the Museum of Comparative Zoology (MCZ), Harvard University] on a level with the first institutions of the kind. While I was brooding over these thoughts I chanced to meet Mr. Nathaniel Thayer, whom I have ever found a generous friend to science. The idea of appealing to him for a scheme of this magnitude had not, however, occurred to me; but he introduced the subject, and, after expressing his interest in my proposed journey, added. 'You wish, of course, to give it a scientific character; take six assistants with you, and I will be responsible for all their expenses, personal and scientific". This was the origin of the celebrated Thayer Expedition to Brazil (1865-1866), as related by Agassiz in the preface of the book A journey in Brazil (Agassiz & Agassiz, 1868), where it is narrated. As professionals, participating in the expedition, were Elizabeth Cary Agassiz, Prof. Agassiz's wife, James Burkhardt, artist, who executed hundreds of beautiful drawings of fishes, John G. Anthony, conchologist, assistant curator of mollusks at the MCZ, Frederick C. Hartt, geologist, with whom Steere would make several excursions [The geological results of the Thayer Expedition were published by Hartt in 1870], Orestes St. John, geologist, Joel A. Allen, ornithologist, curator of birds at the MCZ and later at the American Museum of Natural Historty in New York, and George Sceva, preparator. Dick (1977) published the stations of the Thayer Expedition to Brazil

Wolverine – A native or resident of Michigan, called "The Wolverine State". The origin of this association is obscure: it may derive from a big trade in wolverine (Gulo gulo (Linnaeus, 1758)) (Carnivora, Mustelidae) furs in Sault Ste. Marie in the 18th century or may recall a disparagement intended to compare early settlers in Michigan with the vicious and gluttonous animal.

have at home in/ October, and I often myself/ looking below them for the green/ wheat fields and corn shocks and the/ cattle wandering over the fields./

After a three days' pull of sea sick-/ness I got along well with our sea// fare of salt beef and potatoes, but/ the boat rolled so sometimes that it/ was troublesome eating it. Our sup-/ply of croton [sic; water] ran so low on account/ of the great length of the voyage/ that it became almost coffee colored./ It seemed too bad to drink such stuff/ while there was an ocean of clear,/ sparkling water dashing all around/ us. The man who shall invent a/ cheap and practicable method of fresh-/ening sea water will be a benefactor/ of his race. I had much trouble to/ sleep in rough weather, and thought I/ would wedge myself fast against the/ side of my birth [sic, berth] with my valise and/ other baggage, I would often wake/ up feeling as I had worked hard for/ very little sleep. I spent my time in/ reading and in studying Portuguese,/ and in fair weather I would hang in/ the ropes over the vessel's side and/ fish for sea weed and whatever else/ was afloat. We found plenty of gulf/ weed - Sargossa [sic, sargasso] - in the gulf stream/ and south to latitude 20° north. It/ was commonly floating in detatched pieces from a few inches to a foot in/ diameter, but we sometimes saw quite/ fields of it. In almost all cases these/ pieces extended in long lines across/ the waves instead of parallel with/ them as one would expect. These [sic; there]/ were several kinds of fish watching/ around these bunches of sea weed and/ within them I found many species of/ barnacles./

I saw several of these curious crea-/tures called Portuguese men of war,/ and fished one of them up. They/ are composed of a curious crested/ air sac, six or eight inches in length,/ beautifully colored around its border/ with pink. Hanging under this float/ and supported by it are a number of/ long blue and purple tendrils. The/ float and each one of these tendrils is/ considered an individual animal, but/ performing some special duty for the/ good of the community. They secrete/ a fluid that blisters and burns one's/ fingers like fire. I was much disap-/pointed in regard to the constellations/ that have arisen in the south during/ our voyage. I have heard much of/ the beauty of the Southern Cross,/ but it does not compare for brilliancy/ with our own Ursa Major who hardly/ rises far enough above the horizon/ here to make one think of home. The/ captain called me on desk one night/ during a thunder storm, to see the/ electric lights at the mastheads. I/ believe they are sometimes called St./ Elmo's candles. These balls of light/ seemed to be about four inches in di-/ameter. They were hardly visible/ during the flashes of lightning but/ showed plainly when it was dark or/ when the mast swayed over toward/ a dark cloud. The sailors have a/ superstitious fear of them, and tell/ stories of their rolling down the rig-/ging and exploding on deck.

The day we left New York I was/ surprised to see large numbers of/ butterflies flying about over the water/ fifteen or twenty miles from the coast./ Many had fallen into the water, and/ it seemed as if all butterflies must/ fly to the ocean when they feel their/ end approaching so as to receive a/ salt water burial. When in latitude/ 24°13' north, longitude 46°47' west/ of Greenwich, nearly a thousand/ miles from any land, a grasshopper/ flew on board the vessel, striking the/ sail and falling to the deck. A heavy/ gale was blowing from the east at the/ time. He seemed to have life enough/ left to make another thousand miles/ flight, but I pinned him up in the/ name of Science. It seems almost/ impossible that any thing of so short/ flight should get so far from land, but/ they must be taken up by currents of/ air and carried without any exertion/of their own. I was told while at/ Grand Traverse, Michigan, that the/ grasshoppers sometimes come down/ upon them in swarms out of the/ clouds from the west. They supposed/ they came from the praries [sic; prairies] across/ Lake Michigan, but this would not be/ more than one hundred and fifty miles/ at the most. When within six hun-/dred miles of the Brazilian coast, a/ large and beautiful dragon fly came/ about the vessel. He did not stop to/ be caught, but I expect to find others/ of his tribe here. We were followed/ from near Sandy Hook by a large/ flock of Mother Carey's chickens3 that/ made a business of gleaning the few/ scraps the cook threw overboard./ They left us off the Bermudas, but/ when within a few hundred miles of/ this coast a solitary one came out to/ welcome us in. From the equator to/ this coast we saw many birds. Large/ flocks of them would wheel around/ and swoop down upon small fish that/ seemed to be driven to the top of the/ water by larger ones below. Some of/ these birds came to roost in the rig-/ging one night and the sailors caught/ one for me. We saw many dolphins/ and porpoises and one whale. The/ sailors speared two of the dolphins/ weighing fifteen or twenty pounds/ apiece, and we had them cooked./ They tasted very much like fresh/ white fish. Flying fish are the most/ frequent signs of life on the ocean./ They seemed to be everywhere./ They are much smaller than I expect-/ed, being generally from four to six/ inches in length. They would start/ up singly or in little coveys like quails/

³ Mother Carey's chickens – Birds of the fam. Oceanitidae, *Hydrobates pelagicus* (Linnaeus, 1758).

from before the vessel and would go/ hurrying away over the waves, some-/times to a distance of eight or ten/ rods. They do not generally rise/ more than two or three feet from the/ water, and I think they seldom rise/ from smooth water unless frightened,/ but when the sea is all ridged up/ with waves, they seem to take pleas-/ure in darting out of the side of one/ wave and away into another. When/ near the equator we saw them in/ flocks of several hundreds at a time./ They came on deck several times but/ I found great difficulty in preserving/ them, their scales are so loose./ Every thing is new and strange here, and I hardly know what I shall do,/but I have first-rate health and will/ write you next time how I succeed in/ collecting.

JOSEPH BEAL STEERE

Letter II [Peninsular Courier and Family Visitant, 10(1), January 6, 1871]

FOREIGN CORRESPONDENCE

Number II

MARANHAM [São Luís, Maranhão], BRAZIL, November 16, 1870.

Our vessel has completed her load-/ing at this port, and starts for Para [Belém]/ and the Amazon tomorrow. As soon/ as I could get ashore I hired a room/ and swung my hammock, and went to/ collecting, boarding meanwhile with/ the American consul, Mr. Evans,/ who is from the State of Ohio, and is almost the only American here. He/ treated me with great kindness and/ did all in his power to make my stay/ pleasant and profitable. Two young/ men of Professor Hartt's⁴ company of/ of [sic] seventeen – who are col-

lecting in/ Brazil for Cornell University – left/ Maranham for Bahia and ports further South, just before I got here. I/ was very sorry that I did not meet/ them as they had been over part of/ the route I intended taking and could/ have given me much information./

The city of Maranham [São Luís] on the island/ and in the province of the same name,/ has about forty thousand inhabitants,/ and is one of the oldest cities in Bra-/zil, having churches that date back to/ the year 1,700. The city is built of a/ dark red, volcanic, sandstone, that is/ found in abundance upon the island/ and all along the coast. This stone/ is quite red and porous but the walls/ are two or three feet in thickness and/ covered with stucco and seem capable/ of lasting for ages. The streets are/ very narrow and uneven, following/ the general contour of the ground/ without grading, and roughly paved/ with the same rust colored sand-stone./ The whole aspect of the town with/ its tile roofs and little balconies pro-/jecting over the narrow streets, the/ gen-

required a Divine recreation, thus refuting Darwin's ideas on transmutation of species. Hartt's studies in Brazilian Amazonia made him doubt of Agassiz's hypothesis. In mid-1867 he went back to Brazil (Hartt, 1868a-b), this time alone, to study the southernmost coral reeefs of Brazil, at the Abrolhos Islands. In 1868, by Agassiz's recommenation, he was appointed head of the Department of Geology in the recently founded Cornell University in Ithaca, New York, and in December of that year, having an academic position, he married Lucy Lynde. In the early 1870's Hartt announced publicly that Agassiz's glacial drift was simply the result of bedrock weathering (Agassiz, 1866). In that same year of 1870, the results of his two journeys in Brazil were published as Geology and physical geography of Brazil (see also Hartt, 1941). Still in the same year he went for a third time to Brazil, in the Morgan Expedition, named after Colonel Edwin P. Morgan, the major underwriter, taking with him another professor and eleven Cornell students. On this and a subsequent (second Morgan Expedition) expedition in the following year (see Hartt, 1874b), this time with one of his students, Orville A. Derby, he worked in the Amazonas. In 1874 the Hartts had two children, Rollin (1869) and Mary Bronson (1873). Thay year Cornell granted Hartt a leave of absence for his fifth and final visit to Brazil, leaving his family in Ithaca, to conduct the first geological survey of the country. At first he worked on his own initiative but in early 1875 was officially encharged of the Comissão Geológica do Império do Brasil, created by Dom Pedro II. Lucy and the children then joined him in Rio de Janeiro. By late 1877, however, the Imperial government, seeing little immediate economic benefit and few published results, reduced and finally, by January 1878, cancelled all funding for the Commission. Hartt's family had returned to the United States a few months earlier, Lucy pregnant with twins, which she lost upon her return to Buffalo. Hartt continued in vain to obtain support for the Commission. In the spring of 1878, after he returned to Rio de Janeiro from an exhausting inland expedition, he died of yellow fever on March 18, 1878, at the age of 38. He was buried in Rio de Janeiro, but in 1883 his wife had his remains brought to Buffalo, New York, for interrment in her family plot.

Charles Frederick Hartt (cf. Brice, 1994; Brice & Figuerôa, 2003; Cunha, 1989 (pp. 69-76), Freitas, 2001, 2002; Hay, 1900; Katzer, 1933; Lopes, 1994; Mendonça, 1941; Menezes, 1878; Sanjad, 2004; Simonds, 1897) was born in Fredericton, New Brunswick, Canada, on August 23, 1840, but grew and was educated in Wolfville, Nova Scotia. His interest in geology began at the age of 10 or 11, when he began working for a professor at Acadia College, where he obtained his B. A. (1860) and M. A. (1863). A local shoemaker in Wolfville taught him Portuguese, one of the several languages he would master. His family moved to Saint John, New Brunswick, in the 1860's, and Lyell, then just 24, published a paper about a gold deposit at Corbitt's Mill, Nova Scotia. He came to the attention of Louis Agassiz and in 1865 was one of the geologists chosen to accompany him to Brazil on the Thayer Expedition. Agassiz sought evidence of Pleistocene glaciation at sea level in the tropics that would have destroyed all land life and

eral air of quiet and decay, re-/minds one much more of a picture of/ some old Spanish or Portuguese city/ than of a town in this newest and/ wildest part of the New World. The/ lack of business and bustle may be/ accounted for perhaps by the grad-/ual filling up of the harbor, upon/ which the city depends for its exis-/ tence. There is already very little/ good anchorage left, while the entr-/ance is difficult, being only practica-/ble at high tide. The Brazilian gov-/ernment has an engineer here at pres-/ent examining the harbor but they/ will likely examine and talk with their/ proverbial slowness until the harbor is/ entirely destroyed when Maranham/ will be left to the ants and lizards/ that already claim possession. Nearly/ all the articles of export and consumption are brought here from the/ rivers Stapicura [sic; Itapicuru] and Mearim, the/ soil of the island and main land near/being very thin and poor, producing/ nothing but a few vegetables and/ fruits and not enough of these to sup-/ply the town. Cotton, sugar rice [sic] and/ corn are brought down the rivers in/ considerable quantities. There is a/ tide here of about twelve feet, and/ small trading schooners from the dif-/ferent plantations run in near shore/ and at low tide are left high and dry,/ and the bed of the harbor becomes a/ very animated market. I went on/ board several of these vessels while/ left in this way on dry ground. They/ are outlandish in their model but seem/ capable of standing quite a sea, they/ are usually covered with a rude thatch/ of palm leaves to keep the sun from/ the crew and cargo, and underneath/ this one will see two or three ham-/mocks swang up together with apples/ and bunches of bananas, while pen-/ned up on one end of the deck a fine/ shoat grunts contentedly as if/ he had enjoyed the voyage. In/ another part are palm leaf baskets of/ oranges and yams or of funny little/ ears of Indian corn, with a bundle of/ stalks of the sugar cane, which is sold/ in pieces and eaten like candy. The/ hold is filled with dried fish or char-/coal or with mandioca meal called/ farinha here which forms the principle/ food of the negroes and the poorer/ classes who will gather around a/ gourd of it like chickens and crowd/ it dry into their mouths with their/ fingers. This with a drink of cheap/ and fiery native rum completes their/ meal. Large vessels lie off at anchor/ and load and unload by means of/ lighters. The city is supplied with/ water by little water carts, each drawn/ by a diminutive ox harnessed into/ thills like a horse. One may see these/ carts each surmounted by a huge/ water cask moving slowly about the/ streets at all hours, the drivers incit-/ing their beasts to greater exertions/ in climbing the steep hill sides by/ hissing at them. Hissing is also used/ here to call attention. You seldom/ hear a call or shout, but while pass-/ing along the street you hear the sen-/ora [sic; senhora] at her window overhead hiss at/ the negro woman below who is sell-/ing sweetmeats from the basket upon/ her head, or the merchant standing/ in his door hisses to stop his friend/ who is passing./

Horses are very little used for/ draught on account of the uneveness/ of the streets, all of the heavy freight/ being lashed to long carrying/ poles and carried upon the shoulders/ of slaves. These are trained to the/ business and are splendid fellows/ with great massive shoulders and sym-/metrical forms. I saw several that would make models for a Hercules./ Eight of them will carry a pipe of rum/ or sugar at a fast walk to any yart [sic; part] of/ the city. They grasp each others [sic]/ shoulders thus fastening themselves/ together and move off four abreast,/ keeping step to a song which a leader/ sings to some well known tune, after/ he has sung a couple of lines they all/ break out on the chorus loud enough/ to crack one's ears. Their songs/ when translated do not seem to differ/ much in sentiment from those sung on/ the plantations along the Mississippi,/ generally having reference to the poor/ old darkey and his hard work, or to/ the attractions of lovely Dinah. They/ sometimes intersperse a few words of/ English, one chorous [sic] that I heard, closing with 'My poor Sally', which/ sounded strange enough in its fellow-/ship with the Portuguese. I often/ stopped to watch these gangs as they/ went by, their bodies - naked to the/ waist - glistening with sweat and the/ carrying poles sinking deep into the/ great muscles of their shoulders, which/ are often knotted and calloused like the/ necks of oxen under the yoke. Lesser weights are carried by fewer num-/bers and when there are two they do/ not sing but keep time by alternate/ groans long drawn out through the/ nose./

The marketing is all done by slave/ women who carry their purchases up-/on their heads, and all the smaller pro-/duce of the country is brought in, in/ the same way.

Every morning on my way to the/ woods, I met great troops of negro/ women each having a few oranges or/ squashes, or a little bunch of cabbages/ or lettuce in the ever present palm leaf/ baskets, and at night I met them on/ their way back with a bottle or two/ of wine and a little tobacco or sugar./ The washing is all carried to the little/ fresh water brook in the country,/ sometimes to a distance of six or sev-/en miles. They wash the clothes by/ striking them upon a board or by/ spreading them upon the board and/ beating them with a stick in one hand/ while pouring on water from a gourd in the other. While hunt-

ing along/ the streams after birds and insects I/ was seldom out of hearing of their/ sticks and frequently came in sight of/ groupes [sic] of them at work, often entirely without clothing./

The sense of propriety here in re-/gard to clothing differs essentially/ from that at home, and one is consid-/erably shocked at first but soon be-/comes accustomed to it and thinks no/ more of it. The children of the ne-/groes and of many who call them-/selves something else are not dressed,/ even in the city, until they are seven/ or eight years of age unless it/ is with a charm or string of beads, and/ as one gets beyond the influence of/ police regulations the matter grows/ worse. The negroes seem elevated/ but little above their condition in Af-/rica, and I should think there was/ danger of their getting wild and idol-/atrous again. Many of the supersti-/tions and customs brought from Afri-/ca, are still in full force among these./ I noticed that of filing the front teeth/ to a point like those of a shark, and/ the curious one of sticking a cow's/ horn for good luck in their huts and/shops./

The people here are of all imagin-/able colors, the whites, negroes and/ Indians having become so intermin-/ably [sic] mixed that one of them would/ be as puzzled to tell his race as we at/ home would be to trace all the strains/ of English, Scotch and Irish blood/ that go to make up a genuine Yan-/kee. The European families here/ who have kept their blood pure must/ be very few indeed. There does not/ seem to be the same prejudice of tint/ is the name for it, among the nations/ called Latin, against intermarrying/ with colored races as there is among/ the English and the heterogeneous pop-/ulation of Brazil and of all Spanish/ American countries and the half-/breeds of Canada are the result. What/ the color and the capability of the re-/sulting race will be is a question for/ the future to solve./

It appears to me from what I have/ seen here as if it would result in the/ destruction of all who are concern-/ed in it. There is no particular/ prejudice against color here, many/ holding high civil and military posi-/tions whose color and hair show them/ to be mostly of Indian or negro blood;/ yet among all classes and colors that/ lay any claim to respectability there/ is the strongest prejudice against la-/bor. The opinion of all such persons/ seems to be that it is better to wait/ three hours for a slave to do some/ little service than to do it one's self in/ ten minutes. They have cultivated/ patience in this respect to a surpris-/ing degree, but this everlasting wait-/ing is vexatious enough to those who/ are unaccustomed to it. As a conse-/quence of this system all such places/ as are

considered honorable that is to/ say where there is no bodily labor to/ perform, such as public offices, pro-/fessions, clerkships, etc., are over-full,/ while the mechanical arts and farm-/ing are generally left to the slaves and/ the poorest classes, who have no gen-/ius or ambition. The children are/ brought up from their infancy to de-/spise labor and I often saw them idly/ sauntering to school while some old/ white headed family slave followed at/ a respectable distance, with their/ books and dinner basket./

In one case I saw three young men/ going to a festa [party] followed by a little/ negro girl of about twelve years of/ age carrying three heavy mahogany/ chairs for them to sit in upon their/ arrival. I broke down my standing/ for respectability as soon as I arrived here by carrying a hammock and/ other things I had purchased to my/room, instead of having a negro to/ do it while I stalked on before with/ folded arms. With all this feeling/ against labor there is a strong move-/ment in favor of Emancipation, but/ it seems to be actuated rather by po-/litical and prudential reasons than by/ any humane feeling for the slaves/ themselves. Notices of fugitive slaves/ are frequent in the papers and/ in one I saw the advertisement of the/ sale of a large number of men, wo-/men and children belonging to an or-/phan asylum. The price of a young/ able bodied man is about \$500. The/ women here do not seem to have as/ much freedom as those at home. They/ are not often seen upon the streets,/ and their principal employment seems/ to consist in going to church on the/ frequent saint's days and in watching/ the people of the street from their/ balconies and windows, which open/ immediately upon the side walks and/ bring them face to face with the pas-/sers by. They appear pale and spirit-/less in comparison with our Ameri-/can women, but their large dark/ eyes are certainly beautiful./

The men especially those in whom/ white blood predominates are gener-/ally narrow-chested and inferior look-/ing and are said to be much given to/ wine and other means of dissipation/ but counteract the bad effects of such/ habits to some extent by frequent/ bathing and attention to cleanliness/ of the person./

They are much more polite than we/ are at least as far as the outward/ forms are concerned, always saluting/ both strangers and acquaintances by/ touching or taking off the hat, and/ upon taking leave invariably shaking/ hands with the whole company though/ the parting is only to be for a few/ hours./

I have seen very little here that/ would pay for adoption at home but/ these people who live under the equa-/tor have methods of making warm/ weather endurable that seem worthy/ of trial in the States,

where we cer-/tainly have for a few months of sum-/mer weather hot enough for any lati-/tude. One of these is their custom of/ sleeping in hammocks. A bed is al-/most unheard of, but every room has/ hooks or rings in the wall for sus-/pending hammocks, and the people/ sleep in them, sit in them, smoke,/ read, and do almost everything but/ work in them. They are knit or net-/ted and allow of free circulation of/ the air about the body instead of/ holding and concentrating the heat/ like a bed. Another is their custom/ of keeping all water for drinking pur-/poses in coarse unglazed earthenware/ vessels of the same material as our/ flower pots at home. These allow of/ rapid evaporation not only keeping/ing [sic] water cool but actually lowering/ its temperature. The water from the/ wells and springs here is all quite/ warm when drawn and would be al-/most unfit to drink but for this means/ of cooling it. These vessels are made/ with narrow necks like ancient urns,/ but I do not know that this is any ad-/vantage to them./

JOSEPH BEAL STEERE

Letter III [Peninsular Courier and Family Visitant, 10(2), January 13, 1871]

FOREIGN CORRESPONDENCE

Number III

PARA [Belém], BRAZIL, November 25th, 1870.

I have been intending to write some/ sort of an account of my examina-/tions and collections in natural his-/tory while on the island of Maranham [sic; São Luís],/ but I suppose it will be difficult to/ make such a report interesting to/ your readers. The number of scien-/tific and Latin terms used in such ar-/ticles generally, is one reason they/ are not to the taste of most readers,/ and my letters will be free from that/ objection, as I have now but few sci-/entific works to consult and shall/ send those home by the first boat, as/ they have but little reference to this/ part of the world. I had expected to/ find the coast of Brazil very low and/ showing no rock strata at all, but for/ the two or three hundred miles we/ have coasted along it often rises into/ hills several hundred feet high and the/ shore itself is often quite steep. The/ rocks that out-crop along the beach/ are light colored sandstone, and clay/ shales almost too soft to to [sic] deserve the/ name of rock. They are filled with/ fossil shells, fish,

wood, etc., but these/ are generally in a poor state of pre-/servation. Above these is a dark col-/ored sandstone that is plainly of vol-/canic origin as considerable [sic] of it is/ vitrified and it all shows the action of/ heat. It looks very much like Lake/ Superior iron ore but is composed of/ angular pieces of very pure quarts [sic; quartz], held together by some substance re-/sembling iron. Above this layer/ which does not appear to be continu-/ous, is the sand forming the soil of/ the country and this appears to be/ composed of the same volcanic sand-/stone worn to pieces by the waves./ This soil is very poor in vegetable/ matter though the country is covered/ with a dense growth of the timber/ that is depositing leaves and decay-/ing wood all the time. The island/ and whole coast look as if they had/ but recently emerged from the ocean/ and I was strengthened in this opin-/ion by finishing [sic; fishing] valves of a large oys-/ter that still exists in the sea adja-/cent and the spires of other large sea/ shells lying upon the surface and four/ or five miles from the beach. They/ may have reached there by human/ agency but it is not probable. The island and main land adjacent show/ none of the tall timber for which Bra-/zil is famous. The trees do not gen-/erally grow to more than twelve or/ fifteen feet in height, but stand very/ close together and are so bound to-/gether with trailing plants that it is/impossible to make one's way through/ them except along the paths the ne-/ groes have cut out in their search for/ fruit or wood for charcoal. Every/ one who travels in the woods here/ carries a large sword-shaped knife for/ cutting his way through. Palm trees/ of various kinds rise here and there/ above this jungle to a height of thirty/ feet and where the land descends/ toward the little brooks finding bet-/ter soil and more moisture they crowd/ out the rest of the timber and stand/ thick together making a continual twi-/light by their dense shade. In the/ bases of their huge leaves beautiful/ ferns take root and hang trailing/ toward the ground, and great callas/ six feet in height with flowers a foot/ in length stand at their feet. Below/ at the water side sweet scented white/ lillies grow, and to complete the pic-/ ture great strangely colored butter-/flies float here and there in the gloom./ I found considerable difficulty in mak-/ing my knowledge of botany of any/ avail at first, every plant here is so/ different from those seen at home./ Families that I had only seen repres-/ented by little herbs rise to the dig-/nity of trees. I was especially troub-/led to tell a plam [sic; palm] tree from the bun-/ches of huge grass that grow here./ In fact a young palm tree is a bunch/ of grass, all its leaves rising from the/ ground but gradually the stem rises/ up in the center like a corn stalk and/ the leaves drop

off below and in time/ we have the tall palm with its cluster/ of leaves at the top and below these/ leaves its bunches of cocoa nuts or/ other fruit. Some kinds have leaves/ fifteen or twenty feet long, and they have thick boat-shaped bases six or eight feet in length that do not decay/ readily, but pile up around the tree in/ great heaps. I looked in vain for oaks/ and elms and willows, but found many/ trees and vines related to our locusts/ and acacias, some of them filled with/ beautiful blossoms, though this is the/ dry or winter season when most plants are resting for the coming wet season./ One day while hunting birds I follow-/ed on an old path from the sides of/ which hung great trumpet creepers,/ and orange-blossomed tree helio-/tropes, but lacking the perfume of/ their humble brethren of the green/ house. I came finally to a pair of/ stone posts supporting the remains of/ an ornamental iron fence, all buried/ in wild vines and bushes, beyond this/ I crossed stone ditches made for irri-/gation, now choked with ferns and club-/mosses, and farther on stood a min-/eral bath house with broken naiads/ and spouting lianas. Upon one corner/ the ants had built a great black nest/ and their covered way led winding/ down over the ornamental tiles with/ which the wall was covered. Strange/ water plants clung to the walls and/ dipped their leaves in the water be-/low. At my feet were roses and honey/ suckles still struggling for existence/ with their wilder cousins. Here and/ there stood cocoanut palms and orange/ trees, but instead of fruit, loaded with/ wild vines or ants nests. Upon the/ hill above stood the mansion - its/ walls blackened with smoke and its/roof of tiles fallen in, one corner in-/habited by negroes, the rest left to the/ bats and lizards. At the spring be-/low where the water had broken from/ its artificial barriers, and ran again/ where it listed a group of slave wo-/men washing, hastily threw on/ some article of clothing, said their/ 'bom dia Senhor' and went on with/ their work. I never before saw such/ a complete triumph of nature over/ the works of man. I heard after-/ward that ten or twelve years ago/ this was the property of a rich noble-/man who had not spared money in/ beautifying it. It seems to me that/ the ruined cities of Central America/ that are found buried in the forest/ need not be traced to a race existing/ before the time of the Azteca, but/ may be given a more modern date. A/ hot and moist climate can work won-/ders./

Some naturalist has called Brazil/ 'the land of palms and melastomas,' but if I had authority to give it a/ name I should call it the land of ants/ and lizards. Ants are everywhere/ and of all sizes and colors. Some ex-/cavate the ground like our home spe-/cies, among these are the great black/ ants an inch in length. I

found a nest/ of their make thirty feet square,/ and they had taken out and carried/ into the hollow near by five or six/ cart loads of earth. Their roads/ leading away were four or five inches/ wide and worn down through the/ turf into the earth below. Other spe-/cies finding their enemies too numer-/ous on the ground climb the trees or/old walls or fence posts, and make/ nests from the size of a peck meas-/ure up to that of a hogshead, trees are/ often bent and broken by them. Some/ build these nests of earth, carried/ up from below and make them oval/ in shape, others make them of wood/ fibres like wasp nests conical in form./ One species make [sic] a covered way up/ the trunk of the tree from their cata-/combs, under ground to their city/ among the branches so that all their op-/ operations [sic] are carried on under shel-/ter. One species builds a conical nest/ of clay upon the ground this hardens/ and bakes with the sun so that it/ becomes water proof. These houses/ are from two to six feet in height./ But it is not alone in the forest that/ ants abound. They undermine the/ streets and colonize the walls and eat/ out the inside of timber and furniture/ leaving a thin shell to crush at the first/ strain. They swarm over the tables/ and in the vessels of water and one/ must look sharp or he will eat and/ drink ants. I think of trying to send/ some of the smaller nests home but do/ not know whether I can pack them so/ as to bear transportation or not./

Lizards are almost as plenty and of/ as many species, but are not so/ troublesome. The tile roofs and stone/ walls make good hiding places for/ them and wherever one goes he will/ see these ugly little gray fellows that/ stand and look with a queer nodding/ motion of the head until one is close/ upon them when they scamper into/ their holes. If the ceiling is not close/ they crawl all over the walls. One/ morning I saw my colored landlady/ cautiously tipping up the water jar/ with one hand while poising her slip-/per in the other, but before she struck/ the lizard was out of the jar and out/ of sight. I saw no snakes while upon/ the island, and I don't think they/ stay near salt water, but the first day/ I went into the woods while watching/ anxiously for huge boa constrictors or/ poison coral snakes, I was consider-/ably startled by the splash of great/ frogs a foot or more in length as they/ plunged in the little spring. They/ have a peculiar metallic note that/ sounds as if it was produced far under/ ground. Most of the birds that I/ collected were snipes and other shore/ birds. I saw many parrots, pano-/keets[sic], ibisce [sic], etc., that have been/ brought down the river from the in-/terior, and saw the eggs of the South/ American ostrich for sale and a young/ one running among a flock of chick-/ens. I

spent most of my time col-/lecting sea shells, expecting that I/ should get no other chance as the/ river at Para is fresh. I collected/ about a hundred species and many/ specimens of most kinds. I made/ quite a collection of insects though/ this is not the most favorable season/ for them. The butterflies at home are/ most plenty in open and sunny places/ and in the middle of the day, but/ here they fly most in the morning and/ evening, and in the middle of the day/ seek the densest shade./

I feel pretty well satisfied with the/ result of my two week's [sic] work, and/ expect to be more successful here on/ the Amazon./

JOSEPH BEAL STEERE

Letter IV [Peninsular Courier and Family Visitant, 10(3), January 20, 1871]

FOREIGN CORRESPONDENCE

Number IV

PARA [Belém], BRAZIL, December 8th, 1870.

Last evening the mail steamer/ North America arrived from New/ York this morning I hurried to the/ post office expecting letters enough to/ make up for the long dearth I had/ suffered, but I did not find a single/ letter nor even a paper. No one can/ tell what a bitter disappointment such/ a small matter may become until he has/ tried it. Three small steamers have left/ New Yok since the schooner I took passage upon and the only mail I have/ received yet is a number of the Cou-/rier, and that came by the first steamer./ It almost seems as if the people at/ home had forgotten me and had left/ me to fight it out alone with the In-/dians and Portuguese. My mail must/ have been mislaid or mis-sent. I hear/ that the postage to Brazil has been/raised to 15 cents a letter and that/letters without this amount have been/ sent to the dead letter office. What-/ever the reason may be I shall try to/ wait in patience through another long/ month. I have now spent two weeks/ here and feel competent to say some-/thing about the city of Para [Beém] and its/ people. Para [Belém] is about the size of Mar-/anham [São Luís] but is much more modern in/ its appearance. The streets are wider and the houses constructed with more/ attention to good looks, and there is a/ little railroad here a sort of cross be-/ between [sic] a street railway and a rail-/road proper. It runs to the little village of Nazareth, one of the suburbs/ of Para.

The cars are drawn by/ donkey engines placed in the end of/ the cars. They go whistling about/ and have quite a home-like sound./

The state of morals as at Maran-/ham [São Luís] and all over Brazil is low, very/ low. Marriage is scarcely ever heard of among the lower classes and seems/ to have very little respect among the/ higher./

Drinking is universal, men, women,/ and children of all classes and con-/ditions drink. Those who cannot/ procure wine or brandy, drink the na-/tional wine called cachaca [sic; cachaca]. The waste/ places around town are filled with heaps of wine and beer bottles that have/ been carted there to get them out of/ the way. The better class of mer-/chants who have little villas in the/ suburbs of the town have a queer cus-/tom of using them for borders for/ flower beds and walks, as small stones/ are used at home. They are stuck/ into the ground necks down and serve/ a double purpose, holding the soil in/ place and demonstrating to the public/ the capacity of the proprietor's stom-/ach. They are also often used for a/ sort of (cheveaux de friz [sic; chevaux-de-frise]) for the stone/ walls, being broken and then plaster-/ed thickly along the tops of the walls/ making a sharp and sure barrier/ against theives [sic; thieves]. There is no trust plac-/ed in any ones [sic] honesty here and all gar-/dens and enclosures are surrounded/ by such walls or by sharp pointed/ pickets ten ot twelve feet high. The/ races do not seem intermixed/ so freely as at Maranham [São Luís] and one of/ ten sees Indians of pure blood. They/ are a strange looking race. Their/ features are much like those of our/ North American Indians, but thin hair/ grown down over their foreheads in/ some cases nearly to the eyes, giving/ them a comical appearance. Para [Belém] is the real outlet of the great Amazon/ River. The channel on the other side/ of Morajie [sic; Marajó] Island being so choked with sand bars as to be unnavigable./ Here the rubber, nuts, deerskins, etc.,/ are transshipped from the little flat-/bottomed river steamers to the ocean/ vessels that carry them to other coun-/tries. For this reason Para [Belém] is grow-/ing as fast a place can grow in this/ country and rents and real estate are/ high. There is much more life than/ at Maranham [São Luís]. The merchants move/ with a quicker step and even the/ stone-breakers in the streets strike as/ if there was an end to life and labor./ But more brute force and unskilled/ labor still drive skill and machinery/ from the field. I have yet to see any/ sign of a saw mill in this whole coun-/try the only sawed lumber I have/ seen being that brought on our ves-/sels from New York and used for box-/ing rubber. The lumber for flooring,/ easing etc., is all laboriously hued [sic; hewn ou hewed] out/ of plank

from a tree by hand. This/ necessitates the use of the smaller/ trees and the softer kinds while im-/mense trees of the most beautiful/ woods in the world are allowed to/ rot. The wood work made from these/ hewed plank looks coarse and bung-/ling, but there is a steam planing/ mill at work here now that appears to/ find plenty to do in planing these/ into shape. I have not seen a plow/ since I have been in the country, the/ soil being worked with heavy planta-/tion hoes. I can hardly imagine what/ the effect of thorough plowing and/ manuring would be. At present but/ one crop is raised and then the land/ is allowed to grow up to timber again,/ for ten or tweve years when it will/ bear another crop, but must be clear-/ed with as much labor as at first./ The soil is thin but it seems as if the/ causes that produce such immense/ growths of timber would produce/ yearly crops with proper cultivation,/ vegetables are poor and dear. An/ American gardener would laugh at/ the little bunches of yellow leaves/ that are called cabbages. Water/ melons are the size of ones [sic] double fist./ Indian corn is raised among the cot-/ton and though a variety of dent⁵ pro-/duces ears about six inches in length./ Wheat is not raised at all, nor pota-/toes, but instead of potatoes a taste-/less kind of yam. What few potatoes/ are used here come from Portugal./ Fruits are plenty and cheap, fine or-/anges selling for half a cent, a piece./ Pine apples, bananas, and plantains/ are plenty and of good quality. Be-/sides these there are many fruits that/ I am not acquainted with. Beef is/ cheap but it is fed on wild grasses/ and is almost tasteless and this with/ rice makes the living of the upper/ class here. The rest have to get/ along with mandiaoca [sic; mandioca] meal and a little dried fish./

The people here have great respect/ for Americans, – and hence they agree/ in giving up to us, – and if they are/ ever reformed politically, religiously,/ and physically it must be through us,/ but men without capital could not find/ a worse place to make their way in,/ and men with capital will find enough/ to do with it elsewhere for a long time/ to come. So that these people are/ likely to be left as they are for a while./

The lower classes are bigoted and/ superstitious, as much so likely as any/ Catholics in the world, but the upper/ classes seem to have intermixed a/ good deal of French free thinking/ with their Catholicism./

I am living in a little room twelve/ by fourteen feet in size, quite after the/ style of Robinson Crusoe, though/ have not so much as a cat to keep me/ company. I have no floor but the/ earth and the tiles are my ceiling./ My hammock is swung across one/ corner and along each side a bench,/ one covered with birds and prepara-/tions, the other with books and my/ water jug which looks rude enough/ to have been moulded by the hands of/ my man Friday, these with my gun/ and insect net hung on the walls and/ a box or two to serve as chairs make/ up the sum total of my household/ furniture. I go out early in the morn-/ing and then spend the afternoon/ until supper time in skinning and pre-/serving them. I shall go next week/ down the coast to a little village where/ I expect to find wilder woods and/ more birds. There are any number/ of strange birds and beasts here and/ I shall ship some of them to Ann Ar-/bor before I leave Brazil./

JOSEPH BEAL STEERE

Letter V [Peninsular Courier and Family Visitant, 10(4), January 27, 1871]

FOREIGN CORRESPONDENCE

Number V

PARA [Belém], BRAZIL, December 18th, 1870.

The schooner Victor sails for New/ York tomorrow, and as the captain/ has kindly offered to take collections/ or letters to the States for me free of/ charge I will take advantadge of his/ offer and send a few lines by him. I/ had expected to go to Vigia during/ the past week, but the Consul was ab-/sent so I could not get letters/ and I did not think it best to go/ among strangers who do not speak/ English without some sort of intro-/duction. The Consul has returned and/ I shall go down in the steamer that/ sails on the 22d or the 23d. I have/ spent the last week about as usual/ taking long trips into the country in/ search of birds, shells, etc., and my/ room begins to wear quite the aspect/ of a museum, with preserved birds on/ the benches, rock and shells in the/ corners, some bat skins stretched on/ a board and a couple of sloths hang-/ing on the walls. These sloths are/ curious gray

Maize Dent – The endosperm extends to the top of the grain in Dent Maize, with the hard endosperm being present only on the sides. This causes an indentation of the mature grain at the top due to the shrinking of the softer material. This is the largest maize, stems sometimes attaining a height of 15 ft. A single ear is produced. They are very large, up to 10 in. long, weighing three-quarter pounds and sometimes having as many as 48 rows. The deep wedge-shaped grains are generally yellow or white. Dent maize is the main type grown in the Corn Belt of the United States and it gives an enormous yield. It is the source of most of the commercial grain and also of livestock fodder and ensilage. Over 350 varieties have been developed.

fellows, about as large as/ cats. They seem to be nearly all legs,/ and have no toes, but their feet end/ in large claws that press against the/ hard sole of the foot and thus enable/ them to cling to the trees. They/ cling to the under side of the limbs/ with their backs down and when on/ the ground seem as comfortable on/ their backs as in the normal position./ The natives call them 'prequicas' [sic; preguiças]/ which means 'lazy fellows' in Portu-/guese, and they also call them fellow-/countrymen, in allusion to their own/ back [sic; lack] of energy and think it a good/ joke. I have already found three/ species of kingfishers here one of them/ not much larger than a humming bird,/ and of the same bright colors but/ they all have the unmistakable marks/ of kingfishers and the same rattling/ notes but much weaker than the free/ bold cry of our American bird as he/ dashes down from his favorite dead/ limb and away, first grazing the sur-/face [of] some back woods mill pond in/ his search for a breakfast. I have also/ found three species of a strange family/ of birds that are closely allied to the/ woodpeckers in color and shape and/ habits, but lack the two toes behind/ that form the distinguishing mark that/ forms that family, though they have/ the feathers of the tail terminating in/ spines in the same way to support/ them upon the sides of the trees. Their/ principal food seems to be ants, that/ swarm over the trees as well as upon/ the ground here. As far as my jour-/neys have taken me up and down the/ river, and into the country around/ here it all bears the same appearance./ The river is full of islands and they/ with the main land are low and flat,/ just above water level and thickly/ covered with timber. This timber/ is generally tall and straight and/ grows much like the elms in the/ swamps at home the trees often bulg-/ing out into great spurs at the base,/ and in some cases sending out roots/ from five or six feet above ground so/ that they appear to stand on legs./ This peculiar manner of growth must/ be caused by the moist climate and/ the rainy season which at its height/ must make a lake of this whole coun-/try. The timber differs from that at/home in this particular that while at/ home we have large tracts of oak or/ of pine or beach [sic, beech] and maple, here all/ kinds are mixed together so that/ though there are most beautiful and/ valuable woods here, one might have/ to make a road for half a mile and cut/ down many trees of worthless timber/ to procure a valuable tree or a cluster/ of them. This is said to be the case/ all the way up the Amazon and will/ always be a great draw back in de-/veloping the timber interests of this/ country. More than one enterprising/ Yankee has come here expecting to/ find great groves of cedar or ebony/ wood handy for shipment but has/ gone

back to the states a wiser and/ poorer man. The trees are all loaded/ with vines, some of them of such a/ size that one can hardly tell which is/ the vine and which the support. In/some cases the tree has decayed and/ fallen from their embrace leaving the/ vines still standing upright in their/ own strength. I often make my way/ into rubber camps which are all about/ and even within the bounds of the/ city. They are tapping the trees/ now and each one is surmounted with/ a girdle of little clay dishes stuck/ against the side of the tree under an/ incision through the bark. They/ soon run full of a juice that looks/ just like milk and tastes much like it./ They go around once a day and empty/ these little cups and carry the milk to/ their shanty when then build a fire of/ a certain kind of nut that makes much/smoke and little flame. They take a/ flat wooden paddle about as large as/ one's two hands and pour the mil/ over this and then hold it in the smoke/ and heat for a few moments until the rubber is coagulated when they pour/ on more milk and go on in this way/ much as our mothers used to dip can-/dles, adding coat to coat until they/ form a cake that weighs six or eight/ ponds when they split it open on the/ side take out the paddle and the rur-/ber is ready for shipment. The bit/ of rubber that sticks to the tree and to/ the cups are afterwards pulled off and/ heated and pressed into blocks that/ form rubber of the second quality./ There is another tree here that yields/ a thick yellow juice with which rub-/ber is adulterated and I hardly ever/ find one of those that is not covered/ with marks where it has been tapped./ It must weaken the rubber as it has/ little strength of its own./

Professor Hart [sic, Hartt] and his company/ returned to the States by the last/ steamer. I was unfortunate enough/ not to see him though he had two of/ his company looking for me over/ town. He left me quite a quantity of/ rum for preserving and also several/ cases, nets, etc., that will be of value/ to me. The Brazilian government furnished him with a steamer to ex-/plore the Amazon just as they did/ professor Agassiz while he was here./ Professor Hart publishes a report of/ his explorations here in Para and in/ Portuguese and I hear that he intends/ to return another season. I am told/ that his views in regard to the geolog-/ical formation of the valley of the/ Amazon differ materially from those/ of Professor Agassiz, but I hardly/ know in what respect as yet./

I was awakened this morning before/ daylight by negro women singing on/ their way to attend mass at the church/ near by. I was soon out of my ham-/ mock and ready to follow them into the church. Their singing did not/ appear to me a part of the service but/ a hymn to the Virgin or something of/ that sort

sung in a strange minor key/ that sounded as much like a wail as/ anything else. The church was dimly/ lighted but adorned with many pic-/tures and statues of the virgin and/images of the cross, and much tinsel/ and glass and chandeliers. There/ was not a seat in the church but the/ congregation which consisted princi-/pally of negro women dressed in white, knelt on the stone floors while the few/ of the stiffer necked sex stood be-/hind them. The services were all/ chanted in Latin, but at the proper/ time a boy rung a bell for the faithful/ to make the sign of the cross or to/ bow their heads which was all they/ could do as they were already kneel-/ing, while the male darkies in the rear/ scraped out behind with one foot in/ true negro style but with a strange/ shuffling noise on the stone floors. At/ the critical points in the service a/ man at the doors would send up two/ or three rockets, with a flash and noise/ and great smell of burned powder./ After the service the congregation/joined a procession with the rocket/ firer at their head and singing the/ same wild song as at their entrance/ set out for another church. Day was/ now breaking and a few white women/ were coming in to hear service re-/peated./

I could not but contrast this super-/stition and ignorance with our en-/lightened worships at home, and after/ all even such a recognition as this of/ the Divine Being seemed preferable/ to the perfect state of apathy and un-/belief of the most of those I come in/ contact with here and it seemed pleas-/ant to go into a place where the name/ of God was used with reverence even/ if it was in a strange tongue./

I should think that all Americans/ would go home from this country/ fully convinced that it is our Chris-/tian Institutions that make us the peo-/ ple we are and resolved to support/ them better than before./

JOSEPH BEAL STEERE

Letter VI [Peninsular Courier and Family Visitant, 10(6), February 10, 1871]

FOREIGN CORRESPONDENCE

Number VI

VIGIA, BRAZIL, December 24th, 1870.

I left Para [Belém] yesterday morning on the/ little steamer Odorico Mendes which/ coasts along from Para [Belém] to Maranham [São Luís],/ calling in at all the places of any im-/portance along the shore. The cap-/tain and first engineer are English and/ the opportunity of conversing in my/ mother tongue with those acquainted/ with the country insured me a pleas-/ant trip. The weather was good and/ we had a fine view of this outlet of/ the Amazon. The main channel is/ four or five miles wide and keeps to/ the south shore, while the north shore/ is hidden by many low islands densely/ wooded to the water's edge. As we/ approached the mouth of the river/ the land seemed to rise a little though/ still low and in front of the little vil-/lage of Caloris [sic; Colares] masses of dark vol-/canic rock rise a few feet above/ water./

Vigia itself is just at the mouth of/ the Para branch of the Amazon/ though it is at present almost inland/ from the filling up of the bay in front/ of it by debris brought down by the/ river. The pilot pointed out a large/ island covered with timber twenty/ or thirty feet high that has risen from/ the water within the last twenty years.

The steamer stops a couple of miles/ off while passengers and baggage are landed by the boat. It was growing/ dusk when we left the steamer and/ the shores were covered with cranes/ and other water fowl - quite an excit-/ing sight to a collector's eye. After/ running aground several times in the/ shallows we finally arrived at the/ town but found no steps nor dock to/land on but made our way through the/ mud to terra firma [sic; firme]. I was received/ with much kindness by the gentleman/ for whom I had letters from the Con-/sul, and am installed in a good large/ airy room. I went to the woods this afternoon and saw many birds, among/ them a strange looking toucan that I never saw in a museum. They tell me of three species of toucan here and/ many species of parrots and parro-/keets and if I am well I shall make a/ good collection./

Vigia has 13,000 inhabitants and/ was founded in 1690. There is an/old unfinished church near that looks/ as if it might have been begun in the/ time of Columbus. The houses are/ all of one story and built of adobe-/sun-dried mud, strengthened by posts/ planted in the ground and by small/ sticks of bamboo woven in horizon-/tally. On the principal streets these/ houses are plastered and white-wash-/ed, but as one goes towards the sub-/urbs the white-wash and plaster ra-/pidly disappear and then the mud and/ tiles, and the houses are built and roof-/ed with palm leaves and look like low/ hay ricks that have weathered two or/ three winters. None of the houses/ have glass windows and a very few/ have floors. In these houses with the/ earth for a floor live many of the bet-/ter class of people, who dress well on/ the street and send their children to/ Para [Belém] to study. They own many/

slaves and would consider it an ever-/lasting disgrace to do anything them-/selves, yet they live in houses that a/ backwoodsman in the States would/ despise and would set about at once/ to floor with puncheons or slabs if/ nothing better offered. But the slaves/ here probably find enough to do in/ their slow way in providing their mas-/ters with something to eat and wear/ without flooring their houses. The/ food of the people here is as inferior/ to ours as their inhabitants, and likely/ differs very little in kind or in manner/ of preparation from that of the Ta-/ino tribe of Indians who occupied/ this part of the country when it was/ discovered by Europeans [sic]. The great/ lack appears to be in something to/ take the place of potatoes, some veg-/etable easily raised and kept for use. It could likely be found but no one/ troubles himself about it and all classes/ go on eating farinha prepared from/ mandioca plant which is the real/ staff of life here. Those in better/ circumstances eating it with meat and/ rice the rest with a little dried fish/ or alone. This farinha is in grains of/ all sizes from that of coarse corn meal/ up to kernels of corn themselves./ It is very hard at first, too hard to be/ crushed by the teeth and it seems/ very much filling the mouth with/ dry coarse sand, but it soon softens/ when put into water or soups and this/ is the only way I can eat it, but the/ natives generally eat it dry tossing it/ into their mouths with their fingers/ when too poor to own a spoon. Those/ who are able use considerable coffee/ and make if of a superior quality/ though they drink it with sugar alone,/ milk being unknown in cooking here./ The manner of eating is as fol-/lows: a cup of coffee in the morning/ with a funny little cake of wheat/ bread about as large as one's/ hand, with a little stale English or/ American butter, at ten or eleven/ o'clock a breakfast of far-/inha and fish or beef with rice, and at/ four or five in the afternoon dinner/ of nearly the same materials. I find/ this manner of living rather unsub-/stantial, with my hard tramping in the/ woods, and miss the early breakfast/of bread and butter with meat and/ potatoes and milk that even the poor-/est can procure at home. Consider-/able corn is raised here, but there are/ no mills and as far as I can learn it is/ used to feed the pigs and chickens and/ parrots. Fruit of good quality is/ cheap and if these people cared they/ might live on bananas and pine ap-/ples and oranges but they plant few/ trees and do not seem to have that/ zest for food that we, who are depri-/ved of it a great part of the year,/ possess, I have seen no apples,/ peaches, cherries nor grapes, though/ grapes and peaches are said to be/ raised in some parts. There are many/ wild fruits that the natives admire,/ but very few of them suit my taste,/ though there must be some that

are/ valuable and that would pay to in-/troduce into the warmer parts of the/ United States. If we ever do get/ anything from Brazil that is valua-/ble/ it must be from the wild forests and/ plains. Everything that man con-/trols here degenerates. The horses,/ cattle, swine, poultry, and even the/ dogs, are poor and ill-shaped. The/ sheep are of all colors and look as if/ they might be the direct descendants/ of the flock of Jacob, without im-/provement. They are not sheared/ but the wool grows and drops off to/ make way for a new growth./

Just before I left Para [Belém] a barque ar-/rived there from Boston with the Col-/ony for Bolivia which had been so/ long advertised in the New York Tri-/bune./

The leader of the party, Mr. Piper,/ has an immense grant of land from/ the Brazilian Government subject to/ certain conditions of settlement and/ this is supposed to be only the ad-/vance guard of an immense emigra-/tion to flow into Bolivia⁶. The

In its issue of Febr. 5, 1874, under the heading: "A Bostonian's wanderings", the New York Times said: "Mr. A. D. Piper, the President of a small party of colonists who sailed from Boston for Bolivia in November, 18 [1870], and who was reported to have been murdered by hostile Indians, has been heard from within a few days, his letter giving the particulars of his journey, and the reasons of his long detention. It appears that the party reached the River Amazon in safety, but there, owing to a lack of capital, the majority of the party abandoned the formation of a colony in Bolivia until a more propitious opportunity presented itself. Mr. Piper, however, remained, and having obtained a small steam-boat, pushed his way inland, and penetrated a country that was so far beyond the reach of civilization that a long time elapsed before his expedition was heard from. In July, 1873, news was received that he and his party had been massacred and the tidings were believed by his wife and friends residing in Boston. Mr. Piper's letter is dated Labrie [sic; Lábrea], December, 1873, and in it he describes his trip up the River Purus as the roughest he had ever made. On his way up the stream his party left him at Labrie [sic; Lábrea], and he had to rely for assistance wholly upon his two engineers and the guide, a negro man named Dan, except what assistance he could get from the natives. Afterwards one the engineers abandoned him, and he was compelled to proceed with the sole aid of the other and the negro. He finally reaches Hucaialy [sic; Ucayali] where he selected a site for a town. Here he erected the frame of a warehouse, 54 by 34 feet, and arranged with the chief of the tribe to cover it in with palm thatch. George M. Remick, a young man from Newburyport, Mass., also selected a tract of land in the vicinity for a farm and cleared off a space for a farm, and put up a frame house. At this place they were abandoned by the black man Dan, who stole their best canoe and disappeared down the river. Mr. Piper was delayed so long that he lost the opportunity of the seasons' trade with the natives, but he sewed a quantity of cotton and started. The stream, however, had got so slow by this time, besides being obstructed by fallen trees, that the return passage to Labrie [sic; Lábrea] was long and tedious [See Steere's Letter XXXI, Nov., 1871, about his meeting Piper in the Purus; mentions to other members of this ill-fated adventure are to be found in Steere's

grant/ is situated on the headwaters of/ the Madeira and Purus rivers,/ branches of the Amazon, and is a/ wilderness in the hands of wild In-/dians, but they have visions of rich/ gold and silver mines and all expect/ to make their fortunes in a few years./ They are a fine body of men,/ twenty in number besides the crew/ of the vessel, nearly all young/ and hearty. They expect to make/ their way up the Purus River to their/ grant, and while part of them form a/ settlementt and prepare for those to/ follow, the rest are to make their way/ to the mines and mountains and found/ a new and richer California within the/ old possessions of the Incas. I hope/ they will succeed but I am afraid that/ it will fall like all the other coloniza-/tion schemes that have been tried in/ South America. I have seen several/ who came here as colonists and talked/ with a number of sea captains who/ have taken others home and they all agree that this country is not at/ present fitted for colonization by our/ people./

The American colonists after a few/ years of toil and privation under this/ torrid sun all make their way to the/ sea ports poorer than when they came/ or work or beg their passage home./ Their work here is put in connection/ with that of slaves who work for the/ two or three cents worth of food they/ receive daily. They bring with them/ habits of living that are more ex-/pensive than those of the people here./ They have to run in debt to the pro-/prietors of the fazendas for their ne-/cessities and thus pay much more than/ the articles are worth, and they are/ fortunate if at the end of the year/ they have crop enough to pay their/ debts, and this when the women work/ in the fields with the hoe and the chil-/dren pound the hulls from the rice for/ their supper, and this last is no small/ labor as some of our returned soldiers/ understand from experience. They/ have to contend with immense num-/bers of ants that seem determined to/ eat up everything. Droves of wild/ hogs come out of the woods and root/ up what the ants have spared. The/ wild vegetation grows the

Letters XXX and XXXIV]. Mr. Piper states that the Indians through these regions cultivate little farms, and he represents them as peaceful and quiet, and very quiet [this is confirmed by Steere in Letter XXXIV]. At the date of the letter Mr. Piper was in good health and expected to leave on another trip up the country in January. He had made for a settlement on the Aquiry [Aquiri or rio Acre, an affluent of the Purus, which had been explored and described by William Chandless (1866a-b, 1867)], which would be the second station established on Bolivian soil".

The history of the state of Acre, now Brazil, and the dispute with Bolivia about that region may be found in Tambs (1966, where there also some data about Piper).

whole year/ round and they must be continually at work to keep their crops from being/ overrun, and buried.

Added to these natural evils there/ are others that are just as vexatious./ The mails here are very irregular at/ the best and the lands granted for colonization are generally remote, so/ that if the colonist gets letters six months after they are written he is/ fortunate. There is no strong, well/ organized school system as at home/ and the colonists too poor to hire a/ teacher must let their children grow/ up naked and half wild among the natives./

There is a great difference in settl-/ing in this way; without railroads,/ telegraphs, mails,/ schools, churches,/ without any of the comforts of civili-/zed life, and in settling in the New/ States of the west where the railroads/ soon follow when they do not lead the/ pioneer; where the government estab-/lishes regular mail routes and the set-/tler gets his paper and hears from the/ world once a week at least, and as/ soon as two or three have settled/ within reach the State helps them/ build a little log school house on the/ corner and hire a teacher and the/ children are sent to school./

There is a portion of the State of/ Michigan on the head waters of the/ Muskegon river, that is cut off from/ the settled part of the State by the/ immense pine belts of Mecosta and/ Isabella counties. This pine land is/ either owned by capitalists who keep/ it for lumbering purposes or is too/ heavily timbered or is too poor for/ cultivation while there is no other in/ reach. It has proved a barrier to the/ settlers who have pushed into the/ country behind it, having no settlers/ to make roads, and to keep up means/ of communication through it, and/ they have in the habit of calling/ the country below, with its open fields/ and bearing orchards, "God's coun-/try", but even they have mails and/ schools and highways, and railroads/ are pushing in to help them out, out/ here the most enthusiastic put the day/ of railroads at some centuries in the future, and if it is settled sooner it/ must be by some such race as the/ Chinese who do not have the expen-/sive habits and cultivated tastes of/ even the poorest of our people./

Mr. Piper gave me an invitation to/ go with them [sic] and there are many at-/tractions in such a wild expedition to/ one of my temperament but I thought/ it best to follow my original plan and/ route though there is undoubtedly/ much in the country they are about to/ enter that would be of interest./

Letter VII [Peninsular Courier and Family Visitant, 10(12), February 17, 1871]

FOREIGN CORRESPONDENCE

Number VII

PARA, BRAZIL, January 6, 1871.

I returned here from Vigia yester-/day in one of the canoes of the/ country. I found no shells nor coral/ within reach, but collected and pre-/served ninety-one birds in eight days/ time. Some of them are of the same/ species as those I collected here, but/ there are many new species; among/ them a toucan, a small hawk, a crest-/ed wood-pecker, and a large bird/ called an ondov [sic; hudu]7, that has the/ feet of a king fisher, but its beak is/ like that of the toucan. It tunnels a/ hole in a bank for its nest, just as the/ kingfishers do. I can hardly believe/ that I am discovering new species of/ birds in this most fully explored part/ of Brazil, but I have certainly found/ several families here that are not/ mentioned by Prof. Baird in his clas-/sification. Among these a bird that has the bill and general appearance/ of a kingfisher, but on closer exam-/ination I found that his toes were in/ pairs like those of a parrot, and I/ afterwards saw them catching beetles/ in the air and carrying them to the/ limb of a tree where they pounded/ them in pieces with their long beaks./ I brought back an animal alive with/ me that is very similar to he sloths/ in its habits, but is not much larger/ than a rat, and has a long prehensile/ tail. The natives call it tamandua [sic],/ and mention other species of the same/ genus. With my birds I got many/ scratches and wounds and look like a/ prize fighter that comes out of the ring victorious, but bleeding./

The woods here are frightful to/ hunt in, many of the vines being/ armed with thorns, and a low spread/ing palm whose stem and leaf-stalks/ are covered with long, sharp spines,/ plentiful; besides these there is a spe-/cies of trailing grass which climbs/ with the support of the bushes, to a/ height of eight or ten feet. Its leaves/ are edged with sharp, serrate teeth,/ and when one goes into the bushes/ after a wounded bird he is fortunate/ if he returns without a long palm/ spine in his flesh or without having/ his face and hands cut to the bone by/ the trailing grass. But this is all a/ part of the business, and must be en-/dured./ I am noting the

habits of the/ birds and other animals I collect, and/ though this has probably already been/ done with the most of the species/ here, yet I should find new species/ such notes would be of great value./

While hunting I made my way into/ several mandioca plantations, and/ saw the process of making both kinds/ of farinha. The mandioca plant/ grows to the height of six or eight/ feet in the plantations, and has large/ palmate leaves similar to those of the/ castor oil bean. Where a plantation is/ intended to be made they cut down the/ small trees and bushes, and these thor-/oughly cover the ground with limbs/ and leaves. When this is dry and fired/ it burns the ground over throughly./ In this burned field which looks very/ much like a carelessly prepared back-/woods fallow, having burned and/ blackened trunks scattered over it,/ they plant pieces of the stem of the/ last years's growth of mandioca./ These pieces which are planted about/ two feet spart, soon root and send up/ stems. Corn and cotton are some-/times planted with the mandioca and/ some sort of cultivation kept up, but/ more generally the bushes and weeds/ are allowed an even race. If I un-/derstand correctly the mandioca is/ ready to harvest in six months from/ the time of planting, but by this time/ it is nearly covered and hidden by/ bushes and weeds. The slaves then/ go in and pull up the stems, which are/very slightly rooted, and find from/ one to four tubers on each stalk./ These are shaped like sweet potatoes/ and weigh from half a pound to a/ pound apiece. These are thrown in/ piles in the open places and gathered/ up and carried to the furna [sic; forno]. This/ furna [sic; forno] is a small shed, roofed with palm/ leaves, covering a circular fire place,/ built of clay to a height of two and a/ half to three feet, and with openings/ or arches around the sides for putting/ in the wood. Upon this is placed a/ flat, shallow earthen dish four ou five/ feet in diameter. The furna [sic; forno] is always/ near the water, and those tubers des-/igned for farinha d'aqua [sic; farinha dágua] are put into/ pits until they ferment and fairly rot,/ and I have found them from the/ strong smell arising from them. When they are sufficiently soft they/ are put into presses made of bamboo/ woven into long, narrow bags. These/ are weighted and hung up and the/ juice that flows out caught in earthen/vessels and allowed to stand, when a/ fine white sedimentt falls which is/ mandioca [sic; tapioca]. The mass remaining in/ the press is emptied into a wooden/ kneading trough and the skins and hard pieces picked out, and is then/ put upon the furna [sic; forno] and stirred over/ the fire until it is cooked and dried/ sufficiently to bear transportation and the/ moisture of the climate, when it is put into

⁷ Hudu – Momotus momota parensis Sharpe, 1982, Aves, Coraciiformes, Momotidae (cf. Novaes & Lima, 1998).

bamboo baskets holding/ fifty or sixty pounds each, that are/ well lined with palm leaves, and it is/ then ready for use or market and si [sic, is]/ farniha d'aqua [sic; farinha dágua] or farinha prepared/ with water. Those roots designed/ for farniha secca [sic; farinha seca] are scraped to re-/move the dark colored skin, and then/ grated by hand one at a time, on a/ rude grater and the product put/ upon the furna and roasted in the/ same manner as the other, and this/ forms farinha secca or dry farinha./ They have no roads here, nothing but/ foot-paths and this farinha is carried/ a basket at a time by the negroes from/ the plantations to town, where it is/ sold, after this tedious process of pre-/paration, and in this dry and concen-/trated form for less than two cents a/ pound. Two pounds a day are more/ than a laboring man can eat. This/ plant must be much more productive/ of food with its two crops a year/ than rice, and with a thorough system/ of cultivation this country could sup-/port a greater population than China/ does at present./

There is no danger of the human/ family getting so numerous very soon/ that wars and famine will become/ necessities to thin the population so/ that the earth can support them. The/ whole process of raising and prepar-/ing farinha seems to have been bor-/rowed from the Indians. The imple-/ments are the same and the earthen/ vessels used are of the same material/ and the shape, and rude ornamenta-/tion as those dug up in the Indian/ mounds in the Western States./

The Europeans here have given up/ many of their own tastes and manners/ of life, and have adopted those of the/ Indians. On the other hand, the Indians are much more civilized than/ ours, and come into the towns and/ settle down and form part of the/ people. The reason that we have not/ succeeded better in civilizing the In-/dians, is probably this, there is too/ great a difference in the habits and/ tastes of the races. We are too/ highly civilized for the Indians to/ ever think of imitating us. But they/ do not find it so hard to imitate this/ indolent Brazilian people, with their/ love for display and noise, where the/ Sabbath is opened by rockets and fire/ crackers and cannon, and closed by/ the church bells ringing a fandango./

The form of religion may also have/ something to do with it. The Pro-/testant religion is too abstract, too/ much a matter of thought and belief/ for these materialists to easily adopt,/ but the church here supplies the want/ with images of the Virgin and of/ Christ, which as far as my observa-/tion goes are worshipped by the In-/dians and Negroes here with the same/ feeling with which they used to wor-/ship snakes and crocodiles./

Vigia has abundance of the best/ quality of fish, and fruit, and farinha,/ and if one wished to get out of the/ world with its noise and confusion,/ and find plenty to eat and get it/ cheaply, I know of no better place than Vigia, with its sea breezes and/ pretty river, its shores dotted with/ bamboo fish pounds. Though there/ are thirteen thousand people here, the/ streets are as quiet as those of a country village, except when a pro-/cession passes or the soldiers are out./

There is a small drug store here,/ the proprietor of which does some-/thing in the way of prescribing, but/ there is no regular physician and the/ sick must go to Para to be treated if/ able and if not, let nature and time/ kill or cure.

It would be a fine place for one or two of the young physicians of our/ University to practice in, but whether/ they would make much money or/ whether the lives of the people would/ be prolonged in consequence, are/ doubtful questions./

There is no hotel in the place, but/ I was treated to the best the town/ afforded by my host Senhor Cassiano/ Alvez [Alves], had servants at my elbow to/ do my least wish, and when I was/ ready to return he procured my pas-/sage in the canoe of one of his friends,/ sent by baggage and provisions for/ the voyage on board, and after all/ this, seemed almost offended because/ I wished to pay him./

This is Brazilian hospitality, and/ though some may say that like that of/ the Southern States, it is the product/ of slavery, and does not incommode/ the masters who offer it but the slaves/ who perform the service, yet, no mat-/ter what its cause is, here it is a virtue/ well worthy cultivation by our more/ practical Northern people./

There was no person in the city/ that could speak English, and I had/ a good opportunity to learn Portu-/guese. The Portuguese is derived/ very directly from the Latin, and I/ was somewhat startled on my return/ in the canoe to hear the different/ parts of the vessel, the prow and/ stern, the oars and sails, and the winds/ and waves, called by the very same/ names that Virgil uses in describing/ the voyage of Aeneas and his Trojans/ to Italy. The language seems to/ have the same tendency to drop the/ longer and more difficult endings of/ its verbs, and to grow more simple/ and brief, that other modern lan-/guages show./

There is a curious use of (b) for/ (i) [sic; 'v'] and (r) for (l) that makes the/ language sound as if spoken by a/ person that is tongue tied. This ap-/pears plainly in the words (obrigade [sic])/ obliged, (praga) a plague, (prata [sic])/ plate, (prazer) pleasure, (pobre)/ poor, and (abominavel) hateful, etc./

We ran considerable risk of ship-/wreck on our return, a storm coming/ up that split our sail and broke the/ most [sic] loose from the thwarts so that/ it hung by a few old ropes ready to/ go over the side and sink us, but we/ hold to it until the wind went down a/ little and then lashed it fast and/ worked our way in near shore and/ anchored until morning. We had a/ fugitive slave on board going back to/ his master in irons. His feet were/ fastened together by heavy fitters [sic, fetters],/ and if the vessel had gone down he/ must have gone with it. I tried to/ find a hammer and would have taken/ off his irons and run the risk, but I/ could not make the crew understand/ what I wanted, and so the poor fellow/ had to run the risk./

JOSEPH BEAL STEERE

Letter VIII [Peninsular Courier and Family Visitant, 10(12), March 28, 1871]

FOREIGN CORRESPONDENCE

Number VIII

CHAVES, BRAZIL, January 6, 1871.

I arrived here on the Steamer/ Soures, after a passage of four days/ around the upper end of the great/ island of Marajo [Marajó] or Joannes, which/ lies in the mouth of the Amazon. It/ is over one hundred miles long, and/ contains, as its inhabitants boast, more/ land than the kingdom of Portugal./ Marajo [Marajó] is surrounded by an immense/ number of smaller islands which are/ separated from it by narrow streams/ called furos, that are real channels of/ the main river. These furos are deep/ and we passed through some that/ were so narrow that the steamer al-/most touched on either side./

The islands are densely timbered,/ palm trees of various species gener-/ally standing near the water, and back/ of these, trees of other families. The/ palms of Brazil seem to prefer the/ lowest and dampest ground, instead/ of the high and arid land that is the/ home of the palms of the eastern con-/tinent. These islands and the shores/ of the main land adjacent are the/ home of the rubber gatherers, and we/ saw many of their huts standing near/ the beach. They were all raised sev-/eral feet above ground on piles, so as/ to be out of reach of the flood that/ covers this whole country during the/ rainy season. I went on shore at/ some of the stopping places with a/ smart young Brazilian from Para [Belém],/ and we entered several of

these little/ cottages that are made of pieces of/ cane and bamboo tied together with/ tough vines from the woods. They/ made me think of the play houses I/ used to build in my school-boy days,/ but I was somewhat surprised to find/ a sewing machine in one of them. It/ was American, and Howe's patent,/ and my companion and the lady of/ the house had quite a discussion re-/garding the comparative merits of this/ and another machine, to the patentee/ of which they gave rather a warm/ name, and it was quite a while before/ I recognized the cognomen of Singer,/ the well known inventor though they/ had only softened the - g - in pronounc-/ing his name. The Brazillians [sic] make/ bad work in pronouncing our lang-/uage, and it seems as if there must be/ some national defect in their ability/ to imitate sounds. Though Ameri-/cans are perhaps just as bad in the/ same circumstances./

We had a large number of passen-/gers when we left Para, owners of estates, with their servants and retai-/ners, returning to their fazendas, and/ officers of the army on their way to/ their stations. They seemed very gentlemanly and quiet, not so much/ given to talk as Americans under the/ same circumstances. They drank lit-/tle, though there was always wine on/ the table, but seemed to make gamb-/ling their principal amusement. The/ greater part of them engaged in this/ though I was glad to find a few who/ had scruples against it. They always/ played for money, the stakes gener-/ally being at first a (milreis) about 50/ cents of our money, and gradually in-/creasing, as they wound up, to three or/ five dollars./

I saw many Indians at the different/ islands, many of them with the same/ furtive, scared look, that those of our/ own country have, but some had lost/ this entirely, and I saw several whose/ satisfied air and appearance of good/ living showed them to be men of prop-/erty. Two or three of these took/ first class passage and were treated/ with all respect and politeness by the/ other passengers. If some ethnolo-/gist wishes proof of the Mongolian/ origin of the Indians let him take a/ trip to Chaves. I saw several whose/ eyes had an unmistakable Chinese/ slant, while others, as far as form and/ features are concerned, would pass for/ good Chippewas. All the Indians of/ this low country are fast loosing their/ native language and customs and/ merging in the general population, but/ when I reach those who still retain/ their tribal connection and name I/ will try to take some notes in regard/ to their language, customs, etc./

On the morning of the third day/ from Para [Belém] we broke out of the nar-/row furos we had followed so long/ and crossing the main channel of the/ Amazon, which is perhaps fifteen/ miles wide at

that place, anchored in/ front of the little village of Macassa [sic; Macapá]./ This is on the north shore of the Am-/azon and instead of the low, muddy,/ shores of the islands, that all appear/ to be formed of the sediment of the/ Amazon. We saw [sic; Amazon, we saw] a great bank of/ red sandstone rising up fifteen or/ twenty feet above the water. This/ covers several acres and upon it/ stands a large fort built⁸ of the same/ material. This rock is worn down to/ water level where the village stands,/ but in the river in front of the village/ a little remnant rises up to the same/ height as the main rock. It has the same color and strata, and plainly/ shows that that [sic] the great river has/ been wearing away as well as build-/ing up in these parts./

The village, half buried in palm/ trees, the great rock and fort and the/ little detached crag, form a pleasing/ picture and I regret that I have no/ knowledge of drawing./

After sending the last of our pas-/sengers but myself ashore in the boat,/ we steamed away again and soon lost/ sight of the great river among the/ furos and islands. Just at night we/ came to anchor in a little bay between/ a couple of islands that forms the har-/bors of Chaves, the river often being/ so rough that the boat does not run/ there. A little schooner soon drew/ up beside us and we were boarded by/ the passengers from Marajo [Marajó]. They/ were a jolly set and boiled out of the/ schooner's little cabin like bees. Many/ of them were inhabitants of Para [Belém]/ who had been rusticating in the cam-/pos of the island. I soon had friends/ among them and found one who had/ been to the United States to school/ and spoke good English. Most of/ the Brazillians [sic] with whom I have be-/come acquainted seem to look upon/ the United States as almost the model/ of perfection, and are quite curious in/regard to our schools, railroads, tele-/graphs etc., but I have been surprised/ at their lack of knowledge of geog-/raphy, one young fellow, well educa-/ted in other respects, asking if Ire-/land was a part of the United States,/ and another if the United States was/ an island. They have as little knowl-/edge of their own country as of others,/ much of Brazil being marked unknown/ or unexplored./

There are very few maps, or charts,/ or books of geography in the country/ and I should think some enterprising/ Yankee might make his fortune by/ printing a series of cheap maps, such/ as are so common at home — especi-/ally for this country, and selling them/ here./

All the Brazillian [sic] steamers are fit-/ted up with an upper deck aft, that is/ open to the breezes on all sides. The/ roof and supports have rings and/ hooks for hanging hammocks, and/ here the passengers lounge during the/ day and sleep at night. Though/ alone and friendless in a strange land/ and anxious for the welfare of friends/ at home, I passed many pleasant hours/ thus, swinging in my hammock and/ looking out over the yellow waters of/ the Amazon, so strong is the power of/ pleasant surroundings and good health/ to drive away gloomy thoughts./

I am under obligations for this trip/ to a young Louisianian by the name/ of McGee, who is teaching at Para [Belém],/ chancing to meet me and finding that/ I had made no application to the Bra-/zillian [sic] Government for recognition or/ assistance, but was going it alone, he/ went with me to the President of the/ Province, showed my letters and ex-/plained the object of my journey here,/ and procured me a free passage to this/ place, with a letter to the authorities/ commending them to assist me in ev-/ery way possible. I intend to make/ my way through the island of Marajo [Marajó]/ to the village of Cashuaris [sic; Cachoeira do Arari] on the/ other coast, near Para [Belém], but shall go/ with my host, the superintendent of/ police here, to his fazenda or cattle/ estate on the island of Caviana for a/ few days./

JOSEPH BEAL STEERE

Letter IX [Peninsular Courier and Family Visitant, 10(13), March 31, 1871]

FOREIGN CORRESPONDENCE

Number IX

ILHO, [sic; Ilha] CAVIANA, BRAZIL, Feb. 1st, 1871.

The same day that I arrived in/ Chaves my host, Senhor Lionel, took/ me and my baggage in his canoe and/ and [sic] started for this island, a distance/ of fifteen or twenty miles. I did not/ fancy navigating the mouth of the/ Amazon any more in such shaky ves-/sels as the natives use; but we had a/ safe passage; though part of the way/ there was quite a sea, the Amazon be-/ing so broad here at its mouth that/ the winds raise almost as large waves/ as in the open ocean. In the evening,/ as we drew near the island we heard/ music and saw the flash of rockets,/ and Senhor Lionel informed me that/ they were celebrating a festa in

⁸ The Forte de São José de Macapá, built between 1764 and 1784. the largest and one of most beautiful fortifications made by the Portuguese in Brazil.

honor/ of some saint, at the house of his/ neighbors, and that he intended to/ stop there for the night. We sailed/ to within fifteen or twenty rods of/ the shore and wading the rest of the/ way, and climbing a rude pair of stairs/ that led up the bank, we found our-/ selves in front of a large low hut. It/ was built after the fashion of the/ country of pieces of cane and bamboo/ tied together with vines and thongs/ of raw hide, and was covered with palm leaves; the whole thing being raised/ on posts, above high water. One room of this was floored with rough,/ hewn plank and this served for the/ ball room. It was lighted by little/ rough clay lamps, made by the ne-/groes and filled with the oil of the an-/diroba9 which grows in the forest here. It was surrounded by rude benches,/ though they were made of the valua-/ble Brazilian cedar which, torn from/ its home in the upper Amazon by the/floods, floats down and lodges all/ along these shores. In one corner stood a little table, and upon this a/ brown earthen jar and a bottle filled/ with cachaca [sic; cachaça]. The dancers were of/ nearly all colors and conditions, the/ only regulation seeming to be that/ they should all be free. The dress of/ the gentlemen was generally a white/ shirt and pants, a coat not being a/ necessary article of clothing in this/ climate, and probably owned by few/ present. There was much the same display of flashy jewelry and large/ neckties that one will see at a back/ woods ball of the West. The dress/ of the ladies was more varied, some/ having costly dresses and strings of/ gold beads, while others danced bare-/footed. I noticed one young lady who/ wore a little French bonnet about as/ wide as one's two fingers through the/ whole performance, seeming to think,/ naturally enough, that it was meant/ more for ornament than protection./ The music was made by a couple of violins, the same number of banjos/ and guitars, and a clarionet. They were played alternately by nearly all/ the men present, there being no regu-/lar musicians. The music and dances/ were mostly French, and did not dif-/fer much from those at home, but as/ a sort of interlude between the sets,/ the band would play one of the sim-/ple fandango tunes when some young/ fellow would rise, and, spreading his/ hand above his head, would commence/ snapping his fingers and dancing in/ tune with the music, and would thus/ approach the object of his choice,/ who would rise in time and begin the/ same performance, though her move-/ments were generally of retreat/ rather than of advance. After/ a series of mysterious movements/ about the room of turning in unison/ as if in pivots and of strange pas-/ses as if they sought to magnetize/

each other, all the time snapping the/ fingers of one hand and then the/ other, in time to the music, some/ other fellow would step before the/ one upon the floor and would continue/ the dance. The lady would be re-/lieved in the same way, and thus the/ dance would go on until all who wish-/ed had taken part, when they would/ begin a regular cotillion or waltz/ again. They call this landeau [sic; lundu], and/ say that it is an ancient dance of/ Portugal [sic], but very similar to the fan-/dango of the Spanish. It gives great room for personal peculiarities and preferences, some dancing it with/ cold formality, others expressing much/ feeling and passion by their move-/ments.

About midnight the dancing eased/ and drawing aside a sail that parti-/tioned off one corner of the room,/ they all knelt before the household/ gods, which were kept in a little wood-/en case, and consisted of an image of/ Christ upon the cross, at the foot of/ which there were several grotesque/ figures to represent the Roman sol-/diers, St. John, Mary, etc., and another/ image of the Virgin with several/ pictures. After chanting a song, or a/ pro nobis, in mixed Latin and Portu-/guese, which seemed to include a/ pretty large scale of all the saints in/ its supplications, the female part of/ the congregation kissed the images,/ and the men made an awkward bow/ and scrape of the foot before them,/ and the candles were put out, the cur-/tain drawn, and the dance went on/ with renewed zeal./

The host seeing that I took no part/ in the dancing, swung my hammock/ in a shed adjoining, and tired with/ the day's tossing in the narrow boat,/ I went to sleep with the music clash-/ing away within a few feet of my/ head. On waking up in the morning/ they were still dancing though the/ cup of cachaca [sic; cachaça] was passed oftener to/ keep up the spirits of the flagging./ I was pained to notice that the ladies/ were not treated with the same re-/spect and reverence that they receive/ at home, though this seems to be a/ natural result of the loose system of/ morals existing here./

At noon there was a great dinner/ of beaf, farinha and rice, and a little/ wine, and toasts were given and re-/sponded to in modern style. It seems/ that the inhabitants of the Island, be-/ing nearly all cattle farmers and liv-/ing at distances of from six to twelve/ miles apart, have these reunions five/ or six times a year to increase their/ acquaintance and friendly feeling. At/ four o'clock in the afternoon when we/ left, dancing was still kept up, but/ the cachaca [sic; cachaá] was begining to tell and/ many were getting boisterous./

We arrived at the fazenda of Sen-/hor Lionel after dark, and the next/ morning, his horses had bro-

⁹ Andiroba – Carapa guianensis (Meliaceae).

ken out of/ the carrol [sic; corral] during the night, we started/ on foot to look for them, accompanied/ by a little Indian herdsman riding an/ ox and carrying the lassos./

This island and those of Marajo [Marajó] and/ Mexiana are nearly all campo, there/ being but a narrow strip of woodland/ around the coasts and extending into/ the campo along the little streams./ The campo of this island seems as/ level as the ocean as far as the eye/ can reach. It looks much like an old/ neglected orchard, having low scrub-/by trees scattered all over it that look/ much like old apple trees, clinging to/ the branches of these trees are many/ prickly leaved agaves [sic] and different/ species of tree orchids, though the/ latter are unfortunately not now in/ blossom. The sharp spines of the/ agave furnish a secure resting place/ for many species of birds. The cam-/po is cut up with many sluggish/ streams thast serve to collect the rain/ and slowly conduct it to the river. In the bushes along the banks of these/ streams I saw many birds that are pe-/culiar to the campo, among them a/ little black fellow with a white head,/ and another with the breast such a/ bright carmine, that it seemed to be/ painted. From the streams them-/selves rose many a species of water-/fowl, and in the more open parts of/ the campo the huge jabirus and toyu-/yus - the storks of this country - were/ stalking about./

My host is the owner of over two/ thousand head of cattle and we could/ see them in herds on every side feed-/ing upon the tussocks of coarse grass/ and rushes with which the campo is/ covered. His herdsmen gradually/ collected them together until they had/ over a thousand bellowing frightened/ fellows gathered together in one place,/ and then while the rest kept riding/ around the herd and keeping it crowd-/ed together, my host and his princi-/pal herdsman rode into the mass of/ cattle on trained oxen and examined/ them for wounds, which soon prove/ fatal if not attended to in this climate./ I saw several bleeding from wounds/ that my host said were made by the/ vampire bat. I could find none who/ had seen bats in the act of making/ these wounds, but the farmers here/ laugh at any one who has doubts in/ regard to it, and as many of them/ live with their cattle day and night it/ is probable that if any other animal/ did the injury they would discover it./ As soon as the men found a wounded/ animal they threw their lassos and/ soon had it lying sprawling on the/ ground, when they covered the wound/ with poison to keep away the flies./ These cattle are raised solely for the/ market of Para and are worth on the/ island about thirty dollars each. I in-/tend to collect here for a few days/ and

then try the island of Marajo [Marajó],/ and if possible make my way across/ toward Para from which place you/ will likely hear from me next time I/ write./

JOSEPH BEAL STEERE

Letter X [Peninsular Courier and Family Visitant, 10(14), April 7, 1871]

FOREIGN CORRESPONDENCE

Number X

ILHO, [sic; Ilha] CAVIANA, BRAZIL, February 14th, 1871.

Finding much game here, I put off/ going to to the island of Marajo [Marajó], until/ the sixth of this month, when the/ winter rains set in suddenly, raising/ the streams and lakes of the islands/ so that my host advised me to give/ up my long intended trip through that/island, and I shall take passage with-/in a few days on one of the cattle/ transports direct for Para [Belém]. I have/ collected a hundred birds here¹⁰, many/ of them very beautiful, among these/ parrekeets, trogons, toucans, and oth-/ers just as beautiful that I do not/ know what names to give. I have/ had the greatest trouble in preserving/ and drying my specimens after I had/ collected them. The weather is so/ damp that boots and shoes after stand-/ing a day in the house will be co-/vered with a blue mould, and water/ will often run out of the barrel of my/ gun after standing in the corner over/ night. I have lost several fine birds/ from this cause, but I think that the/ hundred I now have are safe. I shall/ be glad with when May brings brighter skies and drier ground. I have also/ procured three howling monkeys, or/ guaribas - as they are called here, two/ specimens of opossums, a small spe-/cies of alligator, many insects, shells,/ plants, etc. The first monkey that I/ shot was eating fruit in a tall tree,/ and when I picked him up and ex-/amined his feet and hands and looked/ at his countenance, I felt a little as a/ man must feel who has committed murder. My next trial was eating a/ part of him for my supper, but the/ slim fare of farinha and salt, half-/dried and half-roasted beef, that I had/ been living upon had fitted me to/ eat almost anything and under the/ circumstances it tasted good, much/ like chicken. After the first trial I/ could kill

¹⁰ Brodkorb (1937) published a list of the 49 species of birds collected by Steere in Caviana Island [See Appendix III].

and eat them without com-/punctions of conscience. They are/ about as large and lank as a fox hound,/ and jet black, and when full grown/ have about a third of the tail red./ They generally go in troops of eight/ or ten which I should think were fam-/ilies, comprising all sizes and sexes./ While ascending in the forest silently/ waiting for game, I have several times/ seen troops of them passing along,/ generally led by the father of the/ family, the rest following playfully af-/ter, throwing their long tails from/ side to side and catching at the limbs/ of the trees as they swang themselves/ from the top of one to another. I/ don't think they ever descend to the/ ground of their own accord. Their/ howling sounds much like the noise/ made by a drove of enraged hogs/ and may be heard at a distance of/ several miles. It seems to be pro-/duced by the vibrations of a protu-/berance under the chin. They howl/ most during the evening and early in/ the morning, and are also noisy just/ before and during a storm. The ne-/groes point to the finger nails of these/ monkeys, which are very human in/ their appearance, and say that for-/merly the guaribas were men, thus/ inverting Darwin's theory and mak-/ing the lower animals reduced and/ degraded men instead of man a per-/fected and enlightened animal. Not-/withstanding this belief in their hu-/man origin the negroes are ready to/ eat them whenever they can get them,/ and consider them especially good for/ the sick./

I have generally hunted mornings/ and evenings, and spent the middle of/ the day in preserving what I had col-/lected. While at work at this, an old/ grizzled negro, belonging to the es-/tablishment, whose principal business/ seems to keep a sort of almanac/ by cutting notches, in Robinson Cru-/soe's style, in the long smooth rods/ forming the leaf stalks of the miriti/ palm, short ones for the week days/ and long ones for Sundays, and tak-/ing a new rod for each month, is ac-/customed to hobble out to the shed/ where I work, and wonder at my/ steady labors. He expresses his as-/tonishment generally in the words,/ "obranco [sic; o branco] tem paciencia". The white/ has patience. This with "the peculiar chuckle" that the negroes use to ex-/press admiration is about all his won-/der will allow of his uttering; but/ when I brought in a large bundle of/ plants, his gravity broke down alto-/gether, and laughing until he nearly/ shook his old body to pieces, he said/ something about my carrying all of/ the woods off with me. He seems to/ have quite a mind to assist me, and/ when I killed my first toucan, a large/ and splendid bird, he offered to heat/ water to scald the feathers for me,/ and finding that I did not like that/ mode of procedure he picked up the/ bird and before I was aware of his/ intention

begun stripping the feathers/ from it with his fingers, not thinking/ it possible that I could have any other/ use for it than to eat it./

I have been astonished since I came/ into this country by the similarity of the notes of birds here to those of/ birds of the same family at home./ The doves all coo whether perched/ in the palms of Brazil or on the oaks/ of Michigan. The owls all hoot. The/ thrushes may be distinguished as well/ by their song as by their form and/color. The goat-suckers all sing in/ the night and their notes whether few/ or many are all similar to those of of/ the whippowill that used to sing un-/der the window in the long sunner/ evenings of our boyhood. One would/ think that long ago all the birds of/ each family had lived together and/ had a common song; but as with men/ at Babel, there came a confusion of/ tongues, and scattered over the earth/ they all now sing some remembered/ part of the primal song. I should/ think that naturalists would make/ more of this peculiarity in their study/ of species and genera, than they do./

Life in this country like the lan-/guage of the people must be very/ similar to that of ancient Rome/ The/ people live in the cities. The owners/ of estates always have their houses in town/ and pass most of their times there,/ and when on their estates consider/ themselves as merely staying for the/ purpose of making money, and not/ in reality living. Their estates are/ left much of the time in the hands of/ factors and slaves. This life in town/ with all its temptations to immorality/ and dissipation, to which this people/ seem especially open, is very differ-/ent from the pure healthy country/ life of the majority of the American/ people, and which is probably the real/ secret of our success in self-govern-/ment. They take no means to make/ their life on the estates comfortable./ Roads in this part of the empire are/ unknown and they make their way/ from one estate to another on horse-/back by blind cattle paths. Their houses are rude and uncomfortable,/ and often form part of the cattle car-/rol [sic; corral], or the lower part is used as a/ sheep fold. Gardens are never heard/ of, the most they do in this direction/ being to plant a huge bush of red/ peppers, which they use a great deal/ in seasoning their beef. The negroes/ will generally plant a few flowers, and/ curiously enough, instead of culti-/vating the gorgeous tropical plants/ that are native to this country, they/ plant roses, pinks, china asters and/ portulaccas, just such flowers as we/ see most commonly at home./

The soil of the island is mostly clay,/ and seems much richer than the sandy/ soil of the main land. Much of it is/ annually covered by the overflow of/ the Amazon, and I should think that/ it had all the ele-

ments of fertility of/ the valley of the Nile, and might raise/ barley and rice enough to feed a great/ nation, or sown to more nutritious/ grasses might support millions of fat/ Durhams and Devons, while now, un-/fenced and unplowed and covered/ with coarse rushes, it furnishes poor/ food for but a few thousand small and/ half wild cattle./

Though I eat at the table of the/ owner of thousands of cattle and sev-/eral leagues of land, I have nearly starved on the farinha and jerked/ beef that make up the fare here, and/ am glad enough to eat the monkeys,/ toucans, parrokeets, etc., that I kill/ for their skins. The slaves sometimes/ bring me armadillos and the smaller/ species of alligator, though they gen-/erally mutilate them so in killing/ them that they are useless as speci-/mens. The armadillo, baked or boil-/ed in the shell is good eating, much like roast pig. The flesh of the alli-/gator is coarser, though I generally/ made hearty meals upon it. My host/ learning that I am from a country/ where milk and butter are plenty has/ taken pains to have a cow lassoed/ and thrown once or twice to procure a/ little milk, but this is rather a costly/ way of getting it. I expect that milk/ and butter are greater varieties with/ these men who do nothing but raise/ cattle than they are in any other part/ of the world./

JOSEPH BEAL STEERE

Letter XI [Peninsular Courier and Family Visitant, 10(15), April 14, 1871]

FOREIGN CORRESPONDENCE

Number XI

Para [Belém], Brazil, Febr. 25th, 1871.

I am back again in my old quar-/ters, after an absence of five weeks/ upon the islands; but Para [Belém], though/ this is the season of Lent, looks/ much more cheerful than it did when/ I left it, for on my return I found let-/ters and papers from home with good/ news of health and prosperity and/ with means to continue my journey/ as far as I may wish, after full five/ months, of utter ignorance of affairs/ at home, this was almost too much/ joy for one day. I read and re-read/ my letters and then swinging my/ hammock I sat down and read again/ until I had extracted and absorbed,/ every particle of news, and though/ wet and tired, and almost sick with/ my exposure on the islands, I don't/ think there was a happier man in/

Brazil. I was also pleased to find a/ young man here waiting for me from/ Massachusetts, who is here for the/ purpose of making a private collec-/tion, and intends to keep me com-/pany, at least for awhile./

I see from the COURIER, that efforts/ are being made to secure aid from the/ State to build a chapel, etc. It seems/ as if it is absolutely necessary now/ to keep the University in the place it/ holds among the colleges of the/ United States and especially of the/ West. The Universities of the East/ will not always educate our orators/ and historians and poets. Education/ and cultivation as well as wealth and/ political power will eventually take/ their way west. If the University of/ Michigan can be kept in its present/ commanding position the peninsular/ State will be the future center of in-/tellectual power in the West, for men/ of education naturally cluster around the Universities that educate them. But it will not keep this position/ without a struggle; other western/ colleges are doing all that can be/ done with money to outweigh its/ reputation, and it will not do for it/ to lose its best professors for being/ overbid by other colleges, or to close/ his doors against students for whom/ it has no adequate room or means of/ education. The alumni are all young/men yet, and just making names and/ fortunes, and none of them are ready/ to drop off and leave the University/ large bequests, so that if help comes/ at all it must come from the State./

I returned here in the little schooner/ Flor dos Anjos, - Angel's [sic] Flower -/ which brought a load of forty-four/ head of cattle to this market. We/ had a passage of four days, running/ out into the ocean around point Mar-/quiry [sic; Cabo Maguari] and then up the river to the/ city. The cattle were lassoed and/ drawn into the water, and then drag-/ged up the vessels [sic] side by the horns,/ with a rope and pulley and dropped/ into the hold, where they remained/ for the four days of the passage with-/out food or water, when they were/ unloaded in the same way and driven/ into yards where they were to stand/ without food until sold and slaughtrer-/ed, which generally takes several days more. I saw many cattle in/ the yards that were so poor that they/ could hardly get up alone, and it is/ upon such beef as this that the peo-/ple of Para [Belém] live. The voyages are/ often six or seven days in length and/ the pilot told of one of ten days./ When they arrived at Para [Belém] several of/ the cattle were dead and dying and/ the authorities would not receive/ them; but they dressed them and/ salting the meat sold it up the river./ The owners of these large cattle es-/tates are now talking of buying one/ or two small steamboats in the United/ States for the transportation of their/ cattle, and this will be much better/ both for them and the consumers./

These islands that are covered with/ campo have not been formed of sand/ or mud brought down by the river or/ driven in by the waves of the ocean/ like the others about them, but are/solid beds of clay that have evidently/ formed the bottom of the river and/ have perhaps been raised above wa-/ter level by some slight volcanic ac-/tion. They are likely kept from/ growing up to forest by fires, that/ run over them during the dry season./ I saw several places where fire had been running recently, and where/ these fires had encroached upon the/ forest, they had killed nearly all the/ timber. Two or three species of/ scrubby trees, that grow upon the/ campo, have very thick, corky bark, that seems to be a good protection/ against fire, which has scarred and/ blackened many of them nearly to the/ top without killing them./

JOSEPH BEAL STEERE

Letter XII [Peninsular Courier and Family Visitant, 10(17), April 28, 1871]

FOREIGN CORRESPONDENCE

Number XII

Para [Belém], Brazil, March 20th, 1871.

I have spent the last three weeks in/ preparing and packing the results of/ my trip to Caviana, and in purchas-/ing cans and cases and other neces-/sities for my trip up the Amazon. I/ have had the proverbial slowness, and/ procrastination of this people to con-/tend with, but am getting accustomed/ to it so that I can now swing in my/ hammock and wait for to-morrow,/ with almost Brazilian patience. Mr./ Lyman and I have procured letters/ to several of the proprietors of the/ island of Marajo [Marajó], and we shall go/ there as soon as we can find a vessel/ ready to sail; though the weather is/ very bad for collecting and preserv-/ing at present, rain falling every day;/ but if we can do anything it will be/ preferable to waiting here for better/ weather. The rain storms in this/ country are generally accompanied/ with very little wind, or thunder and/ lightning, but the rain comes straight/ down flooding everything in a few/ minutes./

I returned from Caviana just in time/ to see the last and maddest part of the/ Carnival. The people seemed to have/ given up all business, and dressed in/ their holiday best, were either watch-/ing the sport

going on in the streets,/ from their windows and balconies, or/ were below bearing a hand in the gen-/eneral festivities./

The trays of the fruit women in-/stead of loads of oranges, bananas,/ bacure [sic; bacuri11], etc., were covered with little/ waxen balls filled with water of va-/rious colors, which were brought [sic; bought] and/ thrown from the balconies at the pas-/sers by, or from house to house across/ the street. This seems to have now/ become but little more than childish/ play, but it is said to have been car-/ried so far formerly, as to make um-/brellas necessary to prevent a thorough/ drenching. Here and there through/ the city little squads of masks were/ seen, performing upon their own res-/ponsibility, but the principal interest/ was centered upon a large procession/ of them, the members of which seem-/ed to personate public characters,/ both civil and religious; some hav-/ing the shaven crown of priests and/ other the robes and cassocks of the/ various orders. They were accom-/panied by a band of music and were/ in no hurry to pass, but stopped to/ make speeches and strange panto-/mimes to the people along the streets. There were great sights and perform-/ances at the suburb of Nazare; and among these a fountain of Florida/ water - a kind of perfumery manu-/factured in New York, which has a/ great reputation here./

Lent was ushered in with more than/ usual attendance upon the services at/ the different churches. I almost/ changed my mind as to the infidelity/ of the higher classes, when I saw the/ principal men of the city laboring/ along the streets, carrying upon their/ shoulders life-sized images of the Vir-/gin Mary and other saints./

These images were planted up-/on large platforms, which were cov-/ered with flowers, rock work, etc.,/ and must have been heavy, judging/ from the red and sweaty faces of the/ bearers. The first great procession/ was upon Ash Wednesday, when all/ the images of the city seemed to be/ upon the street dressed in their richest/ and brightest colored robes./

I think there must have been as/ many as thirty of these full-sized fig-/ures in sight at one time along the/ street; each being accompanied by a/ little band of bearers, who at inter-/vals relieved each other of the bur-/den. They carried large wax tapers/ in their hands, for use at night, or/ in the churches, and each band was/ distinguished by the color of the/ robes of its members. The regular/ steps of the bearers gave the images/ a motion that was almost life-like, and/ one could almost imagine, as an im-/age of the Savior, with

¹¹ Bacuri - Plantonia insignis (Clusiaceae).

hands ex-/tended, passed, that he was blessing/ the multitude kneeling below; or/ that – Mary at the tomb – was actually/ weeping and wringing her hands./

The silence and attention of the/ people showed their sympathy with/ the sight, and the heart would be hard/ indeed that could not be moved at the/ scenes thus brought to mind. When/ an image of especial sanctity came/ up, the people spread their handker/ chiefs upon the ground and knelt un-/til it had passed by; and even the/ troops lowered their muskets, took off/ their caps and knelt in long lines be-/fore it./

A few days afterwards there was/ another great procession, that com-/memorated the scenes of the crucifix-/ion. At its head was carried an im-/age of Christ of life size, bearing the/ cross, and accompanying it were sev-/eral little girls of six or eight years of/ age dressed as angels, with bright col-/ored dresses and great wings upon/ their shoulders, that were colored/ like the wings of butterflies. These/ little angels bore the hammner, nails [,]/ ladder, and other implements sup-/posed to have been used at the cruci-/fixion./

Ever since I first saw the almost/ idolatrous superstition of the lower/ classes, and the seeming indifference/ of the better educated here, I have/ despaired of the feeble influence that/ a few missionaries, scattered here/ and there, may have towards intro-/ducing a more enlightened Christi-/anity among this people, especially/ while we are sending to those shores/ by every ship, sailors, engineeers, cap-/tains, and I might say, consuls, who/ have no respect for religion; but en-/ter into all the immoralities of the/ people here with such a zest that the/ natives are astonished. The most/ drunken, besotted wretches I have/ ever seen here called themselves Eng-/lish and Americans, and the drunken-/ness of the English has even become/ proverbial, so that when a man of/ any nation is beastly drunk, they call/ him: good English./

These people all call themselves/ Catholics, and that church has to/ bear the weight of their immoralities,/ and in the same way they take all/ Americans and English for protest-/ants, and judge of our religion by the specimens that we send over./

I don't wish to say a word against/ these noble, and self-sacricifing men/ who leave home and friends to preach/ the gospel in foreign lands; but it/ seems as if a part of the same zeal,/ and enterprise, and money, would be/ well laid out in more determined and/ systematic efforts to Christianize the/ great body of men who man our com-/mercial navy, and who, if Christians,/ would carry the great tidings to every/ port on earth, as they now carry oaths/ and obscenity. I have found several/ men here who know no Englis but/ oaths that they had picked up in this/ way, and they

would repeat them to/ me, thinking that I would be pleased/ to hear my native tongue spoken./ The only offset to these evils is the/ influence of those Brazilians who have/ been in the United States, and have/ attended our churches, and have seen/ the real Christians of our country./

I was passing along the street the/ other day and seeing the open window/ and door of an image manufactory,/ I entered and had quite a conversa-/tion with the proprietor in regard to/ the manufacture of this staple, pricing/ several of the saints, among others,/ some black ones with wooly hair, that/ find ready sale among the negroes/ here, who are pleased to have a saint/ among their kindred. When he found/ that I was an American, he told me/ that he had a son in the United States/ at school, who had written to him/ much about our religion and the/ severent [sic; reverent] manner of our people while/ attending service in the churches, so/ different from the behavior of the/ people here./

That son of an image maker, who/ may be unknown and uncared for by/ Christians in the United States, is/ likely doing more by his letters to/ change the belief of this people to/ something better, than a missionary/ here, with all the prejudice of race/ and religion, and the difficulties of/ the language to contend with could/ do. In spite of the poor specimens/ of our people who make their way to/ this country, the Brazilians have the/ highest opinion of our schools, manu-/factures, and all that goes to make us/ a people, and it is the highest ambi-/tion of many fathers to send their/ children to the United States to/ school./

It is through these educated and/ Christianized sons, at it seems to me,/ that this people can be most easily/ reached. If we were as zealous and/ enterprising Christians as we are/ merchants, farmers, and manufactur-/ers, the whole would be Christianized/ within twenty years from the mere/ force of our example./

JOSEPH BEAL STEERE

Letter XIII [Peninsular Courier and Family Visitant, 10(18), May 5, 1871]

FOREIGN CORRESPONDENCE

Number XIII

PARA [Belém], BRAZIL, April 3, 1871.

We are back again in the city of/ Belem or Gram Para [sic] after a stay of/ eight days at the little village of/ Soures [sic; Soure], on the island of Marajo [Marajó]. We/ had a very pleasant trip considering/ the state of the weather, and our let-/ters of introduction insured us good/ treatment. The village of Soures [Soure] is/ much higher than the greater part of/ the island, there being a ridge of/ high land reaching from the river/ Arare [sic; Arari] to this village, that appears to/ be of the same formation at the main/ land on this side, while the rest of the/ island seems to have been formed re-/cently of the mud of the Amazon or/ from sand blown in from the ocean./ The shores of the igarape [igarapé] at the/ mouth of which Soures is situated/ have rocky banks, the rock being the/ same sandstone that is found trough-/out this country, though much harder/ than usual and filled with crevices/ that are generally perpendicular and/ make the rock appear almost colum-/nar. This rock overlies beds of/ white clay that are in many places/ most beautifully colored with red/ and yellow. The shores toward/ Point Marquary [sic; Cabo Maguari] lose this rocky char-/acter and are blown up into sand/ heaps that made me think of the/ eastern shore of Lake Michigan,/ though the hills are lower and instead/ of being covered with scrubby pines/ and cedars, have the peculiar trees of/ this climate, but bent and shorn by/ the wind in the same manner. These sandy shores make a splendid place/ for bathing, the surf rolling in great/ waves at all times. The little Indians/ and negroes would dive through these/ waves, turn summer-saults in them,/ and perform at many antics as por-/poises; but I could only hold my/ breath and let them pass over me,/ when I would often be taken up and/ carried quite a distance toward shore. The only draw-back to the pleasure/ was the fear of sting rays, which are/ no myths here, but are often seen in/ the fish market for sale. They are/ quite small, not being generally more/ than a foot and a half long, but they/ have a couple of spines in the tail/ with which they are ready to strike/ anything that touches them./

The wounds made by them are very/ severe, and I saw a sailor, who was/ stung by one while bathing in the/ river, who could not touch his foot to/ the ground for nearly two months./

In the dry season the water here is/ salt and the fish and shells of the/ ocean make their way up; but as the/ rainy season comes on, swelling the/ volume of the Amazon, the salt water/ is driven down below Marquary [sic; Cabo Maguari], and/ the fresh water fishes follow down/ and occupy the places vacated by/ their briny brethren./

It would be a matter worth the at-/tention of some naturalist to note the/ change of animals and plants, de-/pending upon this annual change/ from

salt to fresh water in the mouth/ of the Amazon. I noticed many shells/ of a common salt water species lying/ up on the beach; but they were all/ dead and occupied by little hermit/ crabs, that carry them about upon/ their backs in a manner that would/ astonish the original owners. There/ are a few species of fish and shells/ that seem to thrive equally well in/ salt or fresh water, and I found the/ great purple edible crabs sidling/ about in the mangrove swamps seem-/ingly as much at home as if in their/ native element, a supply of which/ they had perhaps stored up in their/ underground passages, into which I/ sank knee deep at every step as I/ crawled about to get a shot at the/ beautiful pavons and kingfishers, that/ seem to especially delight in such/ places./

These mangrove swamps, which/ are found wherever salt water can/ reach, are a real curiosity. The man-/grove throws out roots all the way/ up to twenty feet above ground, and/ these roots often reaching the ground/ throw out others, and thus the swamp/ becomes a perfect labyrinth of these/ inverted branches, and one can often/ make his way better by climbing from/ one to another like a monkey than by/ trying to walk on the ground./

These trees often throw out these/ roots with all the regularity of the/ real branches above, and with a trunk/ no thicker perhaps than ones [sic] wrist/ at the ground, a tree will go on in-/creasing in size as these huge braces/ come in, until at a height of twenty/ feet it may be a foot and a half in/ diameter; but the real branches now/ soon begin and the trunk descreases in/ size to the top, so that the tree is/ largest in the middle and tapers to/ both base and top./

We made several trips into the/ woods and collected some fine birds/ and had considerable sport in hunting/ the little (macacos de cheiro)¹², that be-/long to a family of monkeys much re-/sembling our squirrels in size, color,/ and even voice. The species we/ procured was about the size and color/ of the fox squirrel of the West. We/ also procured several of another and/ larger species of the sloth, the (pre-/guica seal [sic; preguiça-real]¹³). They seem perfectly in-/ca-pable of rapid motion, even when/ urged by blows and gun shots and/ when captured, would go to sleep in/ our hands rather than try to escape./ We cut down a tree full of the large/ and beautiful purse shaped nests of/ the japou [japiim]¹⁴, but found no eggs, a pretty/ opossum having eaten them and/ taken up her

¹² Macaco-de-cheiro – Saimiri spp. (Primates, Cebidae).

¹³ **Preguiça-real** – *Choloepus didactylus* (Linnaeus, 1758) (Edentata, Megalonychidae).

¹⁴ Japiim – Cacicus cela (Linnaeus, 1758) (Passeriformes, Icteridae).

residence (with her/ young) in one of the finest of the/ nests. A little negro boy came run-/ning in one morning with news that a/ tiger had just left the beach and gone/ into the woods near by; but though/ we hurriedly loaded our guns with/ charges that would have left little of/ her spotted skin for a specimen if we/ had found her, we saw nothing and had to shoot our heavy loads at the/ little monkeys much to the damage of/ our shoulders./

We made the trip and returned in/ the cattle boats of the country, and I/ am getting quite accustomed to the/ little low, narrow cabins, and the box/ of dirt on the bow, which serves for/ a cook stove, where the crew roast/ their fish or beef, and boil their coffee./

The deck is generally covered on/ the return trip with bamboo baskets/ of (bacure [sic; bacuri]) or other fruit with a few/ baskets of the same material hung/ over the sides of the vessel, in each/ of which three or four poor cramped/ chickens take their passage to market./ One will generally see one of the (ja-/butis) the great land turtles of the/ country tied to the mast or the deck,/ while a string of the little mud turtles/ lie near to keep him company./

These little perquisites [sic] seem to be-/long to the various members of the/ poorly paid crew, who thus contrive/ to make a few vintins [sic; vinténs]. Below the/ deck are long rows of lank cattle/ lashed tightly by their horns to each/ side of the vessel./

When the skies are bright and the/ winds favorable the guitar is always/ sounding, while some one of the crew/ accompanies it with a love song, and/ as one lies on deck in the shade of/ the sail and listens to the music or/ gazes down the great river where/ islands have faded in the distance;/ but left the tops of their taller trees/ looming up like fleets of lofty ship,/ he may with truth call it pleasurable;/ but when night comes on, with the/ rain beating on the leaky cabin roof,/ while lying stretched on the hard/ floor, with the variously colored crew/ piled upon and about you, in a room/ scarcely large enough for one, you be-/gin to doubt the enjoyment, and when/ some maddened ox makes a sudden/ lurch at his rope, which is sure to start/ a dozen more to try the same experi-/ment, making the hollow sides of the/ vessel to fairly roar again, just as you/ have got to dreaming of drier skies/ and softer couches, you begin to think/ it quite uncomfortable. But as mor-/ning breaks the crew crawl out, put on/ their wet clothes, or go without, smoke/ a paper cigar and seem to consider/ this a fair part of the world to live in,/ and why should an American, from/ the boasted land of pluck and enter-/prise, grumble./

While I was at Soures [Sourer] I heard of/ Indian remains in the interior of the/ island, and was given two curious/ dishes that had been dug from them./ These dishes are much better made/ than those new in use in the country/ and are still strong and sound after/ their long burial. I intended to re-/turn within a few days and try to/ make my way to these mounds and/ remains to see for myself; though the/ people declare that it is impossible at/ this time, that the country is all over-/flowed and covered with alligators,/ tigers, etc; but I have found that/ many of the dangers of this country/ prove imaginary on trial, and as I have/ already lived through the attacks of/ formigas do [sic] fogo [formiga-de-fogo]¹⁵, carapawas [sic; carapanás]¹⁶, sand/ flies, and a host of other pests, and/ I think I will survive the alligators./

JOSEPH BEAL STEERE

Letter XIV [Peninsular Courier and Family Visitant, 10(25), June 23, 1871]

FOREIGN CORRESPONDENCE

Number XIV

RIO ARARE [Rio Arari], BRAZIL, May 1st, 1871.

Lent in Para [Belém] closed as it opened,/ with processions and parade. One/ great procession on Good Friday/ seemed to represent the scenes that/ took place at the death and burial of/ Christ. An image of life size was/ carried upon a bier and was accom-/panied by a military band playing fu-/neral marches. A number of little/ girls followed, dressed, as in a for-/mer procession, as angels and carry-/ing the implements used at the cruci-/fixion. One little thing carrying a/ plate with the dice that were suppos-/ed to have been use [sic; used] in casting lots/ for Christ's clothing; another a rod/ with a sponge, and a third a hand-/kerchief with a picture of the face/ of Christ upon it. The proces-/sion was stopped at intervals and/ this last one was lifted upon a stand/ that was carried along for the pur-/pose, when she unfolded the hand-/kerchief and chanted a hymn. The/ colors of the Brazillian [sic] and Portu-/guese vessels in port

¹⁵ Formiga-de-fogo or lava-pés – *Solenopsis saevissima* (Muniz, 1917) (Hymenoptera, Formicidae).

¹⁶ Carapaná – Name given in Brazilian Amazonia to the Culicidae.

were at half mast/ and their yards crossed, and with the/ exception of an English or American/ vessel here and there, that held its/ yards square as if in defiance of this/ mummery, the whole city and harbor/ wore the appearance of deep mourn-/ing. My friend began in the next morn-/ing by sing [sic; singing] Old Hundred or some/ other piece of Church music; but the/ landlord entered our room and in-/formed him that no singing was al-/lowed upon that day, and brought his/ music to a very unceremonious close./

The Saturday following was the day/ set apart for taking vengeance upon/ the traitor Judas, and various effigies/ of him, made of rags and straw were/ drawn through the streets, and cuffed/ and kicked by the rabble that follow-/ed to their hearts [sic] content, prepara-/tory to the final hanging or burning,/ to which they were subjected. Easter/ ter [sic] Sunday was a day of general re-/joicing; the solemnity of the people/ had exhausted itself; cannon and/ rockets were again in request, the/ stores and shops were opened and/ life flowed on as usual./

After a few days of waiting I found/ a little schooner going to Marajo [Marajó], and/ taking passage, again alone, after a/ pleasant trip across the bay, I found/ myself at the Arare [sic; Arari] River, the longest/ river in the island, and the outlet of/ Lake Arare [sic; Arari]. It is at this place, twenty/ miles from its mouth, wider than the/ Huron at Ann Arbor and with depth/ enough to float an iron clad, though/ the little steamers from the campo are/ crowding it at this season with all/ the water it can carry down. The/ banks are covered with water arums/ or callas fifteen or twenty feet high17./ Noisy flocks of cuganos [sic; ciganas]18 or gypsy birds/ were feeding upon the broad leaves/ of these callas or were building their/ nests far out over the water in the/ slender and thorny branches of the/ wild cane, out of reach of the long/ arms of the monkeys chattering in/ the trees overhead. Here and there/ alligators lay floating upon the water/ like old logs, but as we came nearer/ they plunged to the bottom. Islands/ of grass and lilies that had been torn/ from the banks of the lake and river/ above were slowly floating toward/ the ocean, and I really seemed to be/ in that wild and rich Brazil I had/ dreamed of./

I am stopping now with Captain/ McGee, with whose son I had already/ become acquainted in the city. He/ is an old sugar and cotton planter of/ Louisiana but losing his slaves and/ most of his property during the war,/ he bought a schooner and set sail with/

I having been wading about the/ campo for several days and have shot/ a few birds, among them a meadow/ lark that resembles that familiar bird/ of our fields so much that I thought/ this one had strayed from home, but/ it proves to be another species./

I saw many broad trails where the/ great ant eater had trodden down the/ grass on his way from one nest of the/ white ants to another, but I saw noth-/ing more of him./

I have seen here for the first time/ what the natives call the (pororoca),/ a great wave that rushes up the river/ in advance of the tide. It can be/ heard at quite a distance and makes/ it rather dangerous for small canoes,/ often upsetting them. The river Ar-/are [sic; Arari] is noted for its fish, and there are/ many fishermen passing in small ca-/noes watching for (piraru cu [sic; pirarucu]¹⁹) and/ (peixe boi). They strike the fish with/ a harpoon as they rise to the surface/ to breathe. The harpoon has a shaft/ six or eight feet long loosely fitted/ into the socket of the barbed blade,/ to which a long and strong line is fas-/tened and when the fish is struck the/ shaft comes loose and the fish is drawn/ up the boat by the line and killed/ with the knife./

The (pixie boi)³ [sic; peixe-boi] (ox fish) seems by/ the description given to be a seal [sic]. They are very large and valuable but/ I have not seen one yet. The (pir-/aru cu [sic])²⁰ is a beautiful fish with large/ scales bordered with red. It grows/ to a length of four

his family for Brazil. After examin-/ing the country further south and/ then going up the Amazon quite a dis-/tance, he concluded that this was the/ most favorable point for settlement/ and selling his schooner he has set-/tled down here alone. Lacking means/ to go into cattle raising, he has broken/ a pair of the native cattle to the yoke/ and is raising sugar cane, rice and/mandioca, that astonish the natives;/ though his shallow ploughing seems/ rather trivial in comparison with the/ deep tillage at home. The place,/ though higher than most of the coun-/try about, is pretty well flocked at/ present and his corn, sweet potatoes/ and tobacco were poor, the heavy/ rains being almost as fatal to such/ crops here as the frost in the States./ The Captain's blue-eyed and flaxen-/haired children seemed out of place/ in this dusky land, but they have/learned to speak Portuguese as read-/ily as English and the boys throw the/ lasso with the skill of the natives./

¹⁷ Aninga – Montrichardia arborescens (Araceae).

¹⁸ Cigana – Opisthocomus hoazin (. L. S. Müller, 1776) (Aves, Galliformes, Opisthocomidae).

Peixe-boi – *Trichecus inunguis* (Natterer, 1833) (Mammalia, Sirenia, Trichechidae).

²⁰ Pirarucu – Arapaima gigas (Schinz, 1822) (Pisces, Osteoglossiformes, Arapaimidae).

or six feet and/ weighs from sixty to one hundred/ pounds. The fishermen skin it and/ then peel the flesh from the skeeton/ and cut into large slabs, which are/ salted and dried and form quite an/ article of trade along the Amazon, in/ all parts of which this fish seems to be/ found. It is a real fish but rises reg-/ularly to the surface, to breathe as it/ seems to me, throwing a part of the/ mouth above water, after which I al-/ways noticed several bubbles of/ air would rise to the surface. I have/ noticed the same thing with several/ species of smaller fish in the river./

The captain has acquainted me/ with many of the peculiarities of the/ people of the island, among others,/ with the fact that they prefer the beef/ of their neighor's cattle to their own,/ and many are the expeditions made/ at night, with lasso in hand, to drag/ home some neighbor's fat heifer, and/ the enmities and suspicions caused by/ such customs seem to be about as nu-/merous. He told me a story that pas-/ses current in the island of one of/ his neighbors, an old white headed/ man, who owns several thousand head/ of cattle. His herdsmen came in one/ evening with news that beyond a cer-/tain island of timber in the distance/ there was a herd of strange cattle./ The news seemed to renew the old/ man's youth, and ordering five horses/ saddled, he set out at dark with his/ men toward the island. The cattle/ were found and the lasso thrown until/ each had a fat ox made fast to his/ saddle, when they dragged them home/ and killing two for immediate use hid/ the rest in some bushes until they/ should be wanted; but to the old/ man's surprise, upon examining the/ ear marks and brands in the morning,/ he found he had been stealing his own/ cattle. It seems his sons and herds-/men getting tired of salt meat took/ this plan to get something better./

I am now anxiously waiting for a/ boat to take me to the village of Ca-/choire [sic; Cachoeira do Arari], where I shall be within reach/ of the Indian mounds I am in search/ of./

JOSEPH BEAL STEERE

Letter XV [Peninsular Courier and Family Visitant, 10(26), June 30, 1871]

FOREIGN CORRESPONDENCE

Number XV

CACHOIRE [sic; Cachoeira do Arari], BRAZIL, May 16th, 1871.

After several ineffectual attempts/ to hire the fishermen along the river/ to take me up to this village, I finally/ found a canoe loaded with farniha [sic; farinha]/ making the passage and came up in/ that. The natives, (Tapuios), as they/ are called here, that strange mixture/ of white and Indian blood,/ which helds a doubtful position/ somewhere between the proprietor/ and slave, seem so well satisfied with/ their mud hut and canoe that they / cannot be persuaded to do hard labor/ by the offer of high wages. They/ prefer to limit themselves to a pair of/ coarse cotton pants, colored a brick/ red by some native bark, and to a diet/ of fish, and farniha [sic; farinha], and often a dearth/ of that rather to labor for some-/thing better. When they have caught/ a fish they feast in regular Indian/ fashion until it is gone, swinging in/ their hammocks and playing the gui-/tar, and then start off in their canoes/ without a morsel to eat, and perhaps/ pass a day or two fasting before they/ find another. The fact is the Indian/ is triumphant in this part of Brazil,/ imprinting his customs and manners/ of life upon the whites and negroes./

Some of the principal men of the/ country think that a compulsory sys-/tem of labor is all that will ever make/ a country of Brazil./

The village of Cachoire [sic; Cachoeira do Arari] has at/ this season as good communication/ by water as Venice, and though the/ houses are raised on posts, the water/ is quite often several inches deep over/ the floors, and sappling the mud walls,/ the whole side of a house often falls/ in. Though living in the water in/ this way gives many of the people/ that (sizoens) [sic; sezões] a sort of fever and/ ague, they try to keep up their spirits/ by playing the guitar and drawing up/ their hammocks out of reach of the flood and wait patiently for next Oct-/ober to bring dry ground. The alli-/gators find this season of high water/ a fine one for them and make frequent/ inroads upon the ducks and chickens/ of the villages./

The other night one seemed to take/ a fancy to make a meal of the senti-/nel standing at the door of the guard/ house. The soldier retreated into the/ front room but the alligator followed/ and he had to go still further back/ into the room where the other soldiers/ were sleeping. There is a dry campo/ sixty rods back of the river, but the/ people seem to prefer to live in the/ water thus, half the year rather than/ to build where they would have to/ walk a short distance to their canoes.

I was fortunate in having a letter of/ introduction to the padre of the vil-/lage who with better sense than the/ rest, has built his house upon dry/ ground./

The padre after three days of wait-/ing, by his authority in the village/ procured me a canoe with a little/ cabin made of banana leaves tied to-/gether wirh vines to cover me and/ my baggage, and three young Topuios [sic; tapuios]/ to take me to the (Ilha dos bichos²¹),/ the nearest of these mounds fortresses,/ after supplying us plentifully with/ provisions he gave the boys directions/ in regard to the journey and told them/ their duties toward me, and we/ started./

We soon left the narrow river or/ igarape guiapi [Lago Guarapi?], upon which the/ mound was said to be, and made our/ way more directly toward it across/ the camps./

The water upon the campo was/ generally three or four feet deep, the/ men paddling where the water was/ open and pushing the boat along with/ poles where there was much grass or/ rushes. We made our way for miles/ through pond lillies just coming into/ blossom. Their leaves and flowers/ though smaller are quite similar to/ the white pond lilly of the North./ There were many vermillion colored/ birds with yellow wings, walking about these lilly leaves and the/ floating grass. They are called (pio-/sauke)22 [sic; piaçoca] by the natives and have the/ toes and claws much lengthened to/ fit them for this manner of life. I/ saw great numbers of the scissor/ bird, hovering over the weeds that/ rose above water, and opening and/ closing the feathers of the tail as a/ butterfly does its wings while hover-/ing over a flower./

The whole country as far as we/ could see, was covered with water,/ and I thought I could realize the ap-/pearance of the earth to the anxious/ eyes of Noah as the flood was sub-/siding. About noon we came in sight/ of the island and after a couple of/ hours work came up with it. It is/ covered with trees, but appears to be/ entirely artificial, the ditch from/ which the earth was taken still show-/ing around it, but whether this ditch/ was made for defense or simply to/ procure earth to build the mound is/ more than I can tell; though the Por-/tuguese call all these mounds (fortal-/ezas,) or forts, a name likely handed/ down from the time they first entered/ the country, when they probably/ found the Indians still occupying/ them. This mound covers more than/ half an acre and is from fifteen to/ twenty feet in height, but it has/ been washed so long by the heavy/ rains that one can not get much idea/ of its original shape or height. It is/ on

the bank of the river, as all I have/ heard of are. The top of the mound/ is covered with bits of pottery and/ upon digging down there I found the/ soil composed to quite an extent of/ the same. The rains have cut several/ deep ravines down to the level of the/ campo, and in these I found many/ larger pieces and in the banks found/ several different levels that appear to/ have been the top of the mound at/ different times: two of these at least/ showed remains of paving the mater-/ial used, being a sort of artificial/ stone made from burned clay, in the/ same manner as the pottery. These pavements showed long use, being/ covered with ashes and charcoal and/ bits of broken pottery./

The fragments of earthen ware/ found in the lower part of the mound/ appeared to be much better made/ than that above, the pieces being in/ many cases beautifully ornamented/ with lines and painted, the paint being/ still bright but washing off when I/ undertook to clean them. The only/ tools I could find in the village were/ an old heavy negro hoe and a crow/bar, so that I could do nothing at/ digging down upon top of the mound/ and had to content myself with dig-/ging in the sides of the ravines where/ the pottery had been broken by the/ banks caving in, or by the roots of the/ trees growing into and through differ/ent articles. Several species of king-/fishers had built their tunnels in the/ banks and flew chattering about as/ we dug./

Just at night we pushed across the/ campo to a neighboring fazenda to/ pass the night, and found the people/ living like those in the village, below/ water level, too stupid to take exam-/ple of the (gentios,) heathen, as they/ call them, and build a mound above/ water level, or even to make use of/ the mound already built to their hand./ The night was passed in ineffectual/ attempts to sleep, and in fighting the/ swarms of mosquitoes, that do not/ confine themselves to species in this/ country but are found in whole genera./ The natives recognizing two grand/ divisions, those that attack in the/ chivalric style of those at home, with/ lance at rest and trumpet sounding,/ and those that stealthily and silently/ stab one in the back from beneath the/ hammock piercing through its meshes/ and all the clothing one cares to put/ on./

I could hear the alligators splashing/ in the river all night and the melan-/choly cry of some night bird, but as/ soon as it was light I roused up my/ crew and we went back to the island/ where we built a fire and cooked some/ coffee and roasted some fish the kind/ padre had furnished us. After break-/fasting upon this and forniha [sic; farinha], we dug/ a little more with the same result as/ before, and then made our way back/ here, to the house of Colonel Bene-/dicto [da

²¹ Concerning the "Teso dos Bichos" in Marajó see Derby (1879b), Gomes (2002), Meggers (1947), Meggers & Evans, 1957, Palmatary (1950), Roosevelt (1991) and Steere (1927).

^{22 &}quot;Piosauke" (piaçoca). Jacana jacana Linnaeus, 1758) (Aves, Charadriiformes, Jacanidae). See no. 6 in Brodkorb's list (1937) [Cf. Appendix III].

Silva] Frade, where I am enjoying the/ hospitality of his son, the Captain,/ the Colonel passing the winter in the/ city./

JOSEPH BEAL STEERE

Letter XVI [Peninsular Courier and Family Visitant, 10(27), May 27, 1871]

FOREIGN CORRESPONDENCE

Number XVI

CACHOIRE [sic; Cachoeira do Arari], BRAZIL, May 20th, 1871.

After a few days of hunting at/ Tojal, the home fazenda of Captain/ Frade, he procured me an old man/ from the village, who was said to un-/derstand the route to the the island of/ Pacoval²³, another ancient mound sit-/uated in Lake Arare [sic; Arari]. Upon the/ morning of the day appointed the old/ pilot arrived, and making a toldo for/ his canoe, and having stored a good/ supply of jerked beef and farniha [sic; farinha]/ furnished by the Captain, we set out/ up the river, having a couple of Ta-/puios to paddle, and the old man sit-/ing in the stern of the boat to guide/ it. The sky was cloudy when we/ started, and we had not gone far be-/fore the rain poured down in torrents;/ but the crew, stripping off their cloth-/ing and putting it under the toldo,/ bent to their work with the rain beat-/ing on their bare backs./

We cut off many long eirenits [sic; circuits] of/ the river by poling across the campo/ from one bend to another. Just at/ night we paddled out of the river/ into a little lagoon, and landing at a/ mud hut standing in a beautiful grove/ of bananos [sic], my pilot told the propri-/etor without ceremony that we had/ come to pass the night with him, and/ swinging our hammocks we soon/ took refuge from the musquetoes [sic] in/ the musqueteira [sic; mosquiteiro] the Captain had fur-/nished me, a little tent generally made/ of calico or musquito [sic] bar to be hung/ over the hammock and reaching to/ the floor all about it. In this I slept/ without a bite, though I heard the/ musquitoes [sic] hungrily clammoring on/ the outside. In the morning, having/ made some coffee and roasted some/ meat for our breakfast, we were start-/ing up

The government agent Senhor Bas-/tors [sic; Bastos] treated me with the greatest kind-/ness, gave me the permission asked to/ examine the island of Pacoval, which/ is upon the government estates and/ ordered breakfast prepared for me, at/ which I had as a variety four little/ potatoes about the size of walnuts, that had been imported from Portu-/gal. It seems as if potatoes could be/ imported from the States to Brazil at/ a profit as they are worth from three/ to five dollars a bushel here, but some/ hard skinned variety would have/ to be used as the more delicate ones/ would not bear transportation. Leav-/ing this fazenda of the government,/ we pushed on until about four o'clock,/ when the pilot said the river was very/ near across the campo here, the river/ making a long circuit before entering/ it, and that we had better stop at a/ fazenda near and push across the/ campo in the morning, when we would/ reach the mound about noon. When/ we arrived at the fazenda I found we/ were among the especial friends of/ the pilot, and drawing our canoe un-/der the house we swung our ham-/ mocks in the open verandah above. A/ couple of large alligators were lying/ in the river near, watching with hun-/gry eyes the dogs and poultry about the house; loading my gun with a/ heavy charge of shot, I rushed off in/ a canoe and getting within half gun/ shot of the largest, I fired at his head,/ but he sank to the bottom with a great/ splash, and I lost my game,/

In the morning we started across/ the campo toward the lake, but my/ pilot soon proved himself at fault, the/ igarape [igarapé] we had followed running out/ altogether in the thick grass, so that/ we that [sic] we had to turn about. The old man became discouraged, and/ thinking of the comfort back at the/ fazenda we had left, ordered the boys/ to push back, saying that it was too/ late now to reach the island, and that/ we would try it another day. It was/ only ten o'clock, and I thought it/ would hardly do to be treated in

the river when we saw a band/ of night monkeys²⁴ in the tree and/ killed one of them. They have very/ short necks and staring eyes that/ give them quite an owlish appearance,/ and they are said to feed only in the/ night. The river rapidly narrows/ here and the belts of timber that gen-/erally conceal the country behind are/ frequently broken, giving views of the/ broad campo with droves of cattle/ wading here and there cropping the/ grass and pond lillies. At ten o'clock/ we reached the fazenda of Arare [sic; Arari], be-/longing to the Empire, and having an/ immense number of neres [?] and over/ twenty thousand head of cattle./

²³ See, for instance, Evans & Meggers (1957), Ferreira-Penna (1876, 1877) and Hilbert (1952).

^{24 &}quot;Macaco-da-noite" - Aotus spp. (Primates, Cebidae).

that/ way, and told him that we must go to/ Pacoval that day, though he said we/ should get there so late that we must/ pass the night there, and pictured to/ me the musquitoes [sic] and snakes and/ rain storms to be expected/ I told/ him that in my country when we paid/ money we expected labor in return,/ and that I could stand the pests one/ night. He called me several hard/ names in Portuguese to the boys, said/ (Americanos) expected impossibility,/ but finding that I was master of the/ situation, he looked about and finding/ the real route to the lake we pushed/ on again. As we came near the open/ water of the lake we passed through/ many acres of wild rice, the real [sic, red] color/ of the beards being apparent at a long/ distance. Many of the heads were/ ripe and the kernels dropped into the/ canoe as we brushed through them./ The lake proper seems to be from two/ to four miles broad and twelve or fif-/teen in length, but we could not see/ land in one direction. The island of/ Paecoval [sic; Pacoval] was in sight rising up at the/ extremity of a low point that puts out/ into the lake, and after an hours [sic] hard/ work we landed upon it. It is cover-/ed with orange, banana and other/ fruit trees planted by the fishermen./ It is not more than ten or twelve feet/ above water and about a hundred feet/ in diameter, but it appears to have/ been much larger, the lake all about/ it being filled with pieces of crockery/ and other debris and the banks are/ continually caving into the water./

As we came hear [sic; near] the bank I saw/ part of a burial urn that the water/ had uncovered, and jumping from the/ canoe, I was soon busy digging it out,/ but the pilot and crew contented/ themselves with wading about in the/ water and fishing up things with their/ feet from the bottom, and in this way/ found several curious shaped little/ dishes that the water had washed out/ of the bank. Just before night we/ paddled across the lake to the fazenda/ of St. Ignace, the proprietor of which/ gave me first such a little stone/ hatchet as we often find in our fields/ at home. He said that they were fre-/quently washed up upon the beach,/ and that the people called them thun-/der stones or thunder bolts, though he/ did not believe that was their origin./ There is none of the stone, of which/ these hatchets are made in this part/ of Brazil, and they must have been/brought from the upper Amazon, per-/haps from the Andes. We went back/ next day and dug in the mound until/ about noon, finding many curious/ things, pieces of idols and heads of/ strange animals. As at the (Ilha dos/ bichos) the most beautiful lines and/ painted pottery seemed to be at the/ bottom, and I dug one coarse dish/ from near the top that differs but little/ from those in use here

at present./ The larger vases seemed to have all/ been used to hold the bones of the/ dead, but these were in all cases too/ much decayed for removal. Among/ other things I found some curious/ three cornered pieces of pottery well/ made and beautifully ornamented/ with geometrical lines painted upon/ them, and with holes in the points/ for strings²⁵. Some of the people here/ think they were worn on the shoulder/ as epaulettes. There was the same/ difficulty as before in the want of/ tools proper for digging, but the water/ had washed the island to pieces so/ much that I made a much better col-/lection, though many things are/ broken as before by the caving in of/ the banks or from the weight of/ others placed above them. As with/ the other mound so with this, it ap-/pears to have been built up to a cer-/tain height, and inhabited and then/ more earth put on and another city/ built, and so on to the top. The pot-/tery found in the lower part of the/ mound shows a people far advanced/ in the arts of civlized life, and I could/ imagine the island of Paccoval [Pacoval] a busy/ and populous city, and the lake Arore [sic; Arari]/ covered with canvass [sic] plying back and/ forth to the little farms along the shore/ or carrying on commerce between this/ place and others, along the river and/ lake; while now nothing is in sight/ but the solitary boat of a miserable/ Tapuio, perhaps the degenerated son/ of this ancient people, paddling slowly/ along in search of a (pirar u cu [sic]) or/ (peixa [sic; peixe] boi). These mounds are found/ all over the central part of the island/ and this may have been the home of/ nations as powerful as those of an-/cient Nineveh and Babylon./

JOSEPH BEAL STEERE

Letter XVII [Peninsular Courier and Family Visitant, 10(28), July 14, 1871]

FOREIGN CORRESPONDENCE

Number XVII

PARA [Belém], BRAZIL, June 1st, 1871.

There being no dry campo within/ reach of Tujal [Tojal], the captain proposed/ a day's hunting at Coralline [sic; Curralinho], another/ fazenda belonging to the family;/ where there were said to be many/ storks

²⁵ The tangas marajoaras, believed to have been used by Indian women to cover the pubic region. Hartt (1876a) published a paper on the subject.

and scarlet ibises. We started/ in the canoe about three o'clock in/ the morning so as to finish the jour-/ney before the heat of the day./

We arrived at Coralline [Curralinho] at seven/ o'clock, when the herdsmen were im-/mediately sent to the campo after the/ horses, and we soon heard their splash-/ing through the water on their return./ When the horses reached the corral/ near the house, the water was level/ with their backs and they were easily/ caught and led behind the canoe until/ we came near the dry campo, where/ they were saddled and we mounted./ I wished a horse that would stand fire,/ but as none of them had been used/ for hunting, they caught me an old/ fellow that did not look as if he had/ life enough to jump. As we neared/ the dry ground great flocks of ducks/ flew up from among the grass, the/ first I had seen, as, like the waders,/ they seem to desert the rivers and/ lakes and go near the dry campo,/ where the water is shallow and they/ can touch bottom with their feet./ Farther on great storks were moving/ majestically about, and a flock of ibises/ flying in the distance looked like a/ cloud of armine. I now started off/ independently for a hunt, but either/ from the horsemanship on my part, or/ a misunderstanding of English on the/ part of the horse, I had considerable/ difficulty in parting company with my/ friends, but by a liberal use of the/ huge Spanish bit, and the raw hide/ whip furnished me, I finally got off/ after the birds. I soon came in range/ of a stork but the old horse would/ shy every time I tried to shoot, and/ after an hours' [sic] hunt I had killed but/ three birds, a stork, a white heron/ and a duck, though I had sent several/ others off badly crippled, but a Tap-/uio who hunted all the time for the/ captain's table, and who was brought/ along in anticipation of my bad luck,/ had better fortune and I returned/ will all the birds I could take care of/ for the next two days. The vacceiro [sic; vaqueiro],/ for my especial benefit singled out a/ wild ox from the herd and chasing/ him across the plain threw the lasso/ and wheeling his horse brought the/ ox up with almost force enough to/ break his neck. I told him of the/ buffaloes on our western plains and/ he said they could be easily caught/ with the lasso./

The vacceiros [sic; vaqueiros] when they see the/ tiger or panther prowling about their/ herds watching an opportunity to/ pounce upon some stray calf, throw/ the lasso over his head and starting off at a gallop drag the tiger howling/ and scratching along the ground until/ he is strangled by the noose, when/ they take off the spotted skin and/ add its value to their scanty four or/ five dollars per month, which is all/ they are paid for this hard and dang-/erous life. The

great ant eater is also/ often enough caught with the lasso, and/ though his strength and immense/ claws make him a match for the tiger,/ the noose of raw hide about his neck/ soon makes him humble enough./ After counting our spoil, and taking a/ cup of coffee we paddled down the/ river to Tujal [Tokal] to breakfast. After/ another trip to the campo I found a/ cattle bark going to the city and/ packing my plunder I went aboard./ We shipped down easily out of the/ river making the same distance in a/ few hours that it had taken days to/ make in ascending. While we were/ lying at anchor at the mouth of the river waiting for the tide to turn,/ we took the boat and went on shore,/ where one of the men gathered a lot/ of the fruit of the (asai [sic; açaí]), and on our/ return we had a real feast of it. The/ (asai [sic; açaí]) is a species of palm²⁶ growing on/ low ground and to a height of forty to/ sixty feet with a diameter of four or/ six inches. The trunk is perfectly/ smooth and white, and just below the/ small and loose crown of long leaves/ there are generally several clusters of/ the fruit in different stages of growth./ The fruit stalk looks like a great/ coarse broom the brush of which is/ two or three feet long, and hanging/ within and over this like grapes are the/ fruit, which are about the size of a/ cherry, and black when ripe. A/ bunch of these weighs fifteen or twenty/ pounds. The fruit consists of a/ woody nut covered with a black skin/ or rind, which is the only part used. The fruit is put in hot water until this/ this [sic] rind is softened, when it is rub-/bed and worked with the hands until/ the eatable part is all washed off,/ leaving the water thick like cream/ and of a dark violet color. This is/ then sweetened with sugar and thick-/ened with farinha and eaten. It is/ delicious, the next thing to strawber-/ries and cream, and is one of the notable products of this part of the/ country, the asai [sic; açaí] not growing upon/ the upper Amazon. The fruit-eating/ monkeys and the toucans are very/ fond of it the quaribos [sic; guaribas] living almost/ exclusively upon it. The Tapuios/ climb the smooth trees by lashing/ their feet together by a cord, and they/ make a real article of trade of it,/ bringing to the city heavy large ca-/noes loaded down with it./

Some of the birds had already com-/menced nesting while I was in the/ island, among them the anous²⁷ or keel/ birds, of which there are two species./ They seem to be real socialists in their/ habits always being found in/ flocks even at the time of nesting,/ and instead of each pair building a/ separate nest they

²⁶ Açaí – Euterpe oleracea (Arecaceae).

²⁷ Anu – Name applied to the genera *Crotophaga* and *Guira* (Aves, Cuculiformes, Cuculidae).

build a huge flat/ nest of sticks for the community, in/ which they lay twenty or more eggs,/ and then set in company. The per-/rokeets build their nests within the/ earthen nests of the white ants which/ are found in the trees. They tunnel a/ hole from under the side of the ant/ nest upward toward the center for/ eight or ten inches, when they turn/ to one side and making a little plat-/form, have the nicest dryest kind of/ place for raising their young. They/ seem to pay no attention to the ob-/jections of the little white ants, that/ seem to lack the means of defense of/ the true ants; placing all their de-/pendence in their walls. Many spe-/cies of birds build globular nests, and/ the opening is generally so small and/ made of such elastic materials that it/ can hardly be found, closing almost/ completely after the bird passes/ trough. The superabundance of/ haws [sic; hawks] and opossums and other egg-/eaters compels the small birds to take/ unusual means for protection. One/ little brown bird about the size of the/ blue bird, builds a nest a foot and a/ half in diameter of large sticks half an/ inch through and a foot long and gen-/erally covered with thorns, and away/ down among these thorns with no ap-/parent entrance, it deposits its four/ little white eggs. I could not believe/ that such a small bird built so large a/ nest until after repeated observation./ One of the most common means of/ defense is to place the nest in a tree/ that has a hornet's nest upon it. The/ nest of the viuva or widow, a little/ black bird with a white head that is/ frequently found in the low bushes of/ the campo, is invariably found on a/ limb along with a hornet's nest be-/tween it and the body of the tree,/ thus keeping all animals from cling-/ing to it. If this is not reason I do/ not know what to call it. Among/ other birds that follow this plan is the/ benti vi [sic; bem-te-vi], a brown bird with a yellow/ breast, about the size of the robin;/ but this bird has another noteworthy/ peculiarity; it has the habit of stealing/ the material for its nest from others./ Wile at Caviana, I heard a real dis-/turbance among some small birds, a/ pair of which had built a nest in a/ lemon tree near the house, and going/ to see the cause of this, I found that/ a benti vi [sic; bem-te-vi] was making regular trips to/ their nests for materials for his own./ He would light on a tree near by and/ watching a favorable opportunity, in/ spite of the cries of the little birds/ and their friends that had collected/ to assist them, he would dart down/ and pulling a huge mouthful from the/ side of the nest, to the great danger/ of the eggs within, would fly off to/ his own nest in a tree near by./

There is a little yellow fever in the/ city, and, as I have finished all that I/ intended to do here, I shall

take the/ next steamer for Santarene [sic; Santarém], which is/ about five hundred miles up the river.

JOSEPH BEAL STEERE

Letter XVIII [Peninsular Courier and Family Visitant, 10(31), August 4, 1871]

FOREIGN CORRESPONDENCE

Number XVIII

SANTAREM [Santarém], BRAZIL, June 17th, 1871.

Upon the evening of the eleventh/ of this month, after a hard week's/ work in packing and shipping my/ collections, and in preparing for the/ trip up the Amazon, I bade farewell/ to Para [Belém] and the few friends I had/ made in it, and going on board the/ steamer Obidos [Óbidos], at three o'clock in/ the morning we started up the river./ The Amazonian steamers generally/ leave the city in the night, so as to/ cross the bay of Marajo [Marajó] before the/ wind, which generally blows strong/ up the river during the latter part of/ the day, has made it rough and dis-/agreeable./

I had presented some duplicates of/ shells etc., to a museum that has/ lately been organized in Para, and/ thus becoming acquainted with Mr. Penna²⁸, the

²⁸ Domingos Soares Ferreira-Penna (Cunha, 1973: 11-41, 1989: 20-47; Verissimo, 1894) was born on June 6, 1818, in Mariana, Province of Minas Gerais, Brazil, then a United Kingdom with Portugal. On September 8, 1858, when 40 years old, he arrived at Belém, Pará, to serve as one of the secretaries to the recently appointed President of the Province of Pará, Lieutenant-Colonel Manuel de Frias e Vasconcelos. He dedicated himself to geographical studies, embracing physical geography, geomorphology, geology and economic geography, especially of Pará; was a pioneer archeologist, investigating the ceramics and other vestiges of ancient peoples of the Amazon, being also interested in ethnology and journalism. Many were his expeditions in Amazonia. Most of his publications have been reedited in 1973 (Conselho Estadual de Cultura). Agassiz's visit to Belém in 1866 influenced Ferreira-Penna's decision of founding a Museum in that city. On October 6, 1866, as a nucleus for the future Museum, was founded the "Associação Philomatica", and in October, 1867, the Association was able to lodge a Museum in a rented house at the Rua Santo Antônio, no. 26. The Museum was officially inaugurated on March 25, 1871, and Ferreira-Penna began to form a library. The Museum was transferred to the Liceu Paraense, and afterwards to a house rented in the Nazaré road (nowadays Avenida Nazaré). On January 26, 1884, Ferreira-Penna left the direction of the Museum for a health treatment. He would never return to the Museum, and in the first days

principal director, and a/ man of considerable literacy and sci-/entific reputation, he had the kindness/ to procure me many letters to offi-/cials and other leading men along the/ Amazon, and also informed Com-/mandante Tavares of the Obidos [Óbidos] of/ my intended trip with him, so that I/ was treated with a great deal or def-/ference; rather more than I relished./ There was a young Brazilian civil/ engineer on board upon some govern-/ment business up the river and as/ the captain had also quite a taste for/ natural history, we passed the time/ very pleasantly, and I learned much/ of the country we were passing/ through. They spoke much of Prof./ Agassiz and Prof. Hartt, and with/ other educated Brazilians hold them/ in high esteem, but hardly know what/ to think of their conflicting theories/ in regard to the formation of the Am-/azon valley./

We passed the first day among the/ low islands in the mouth of the To-/cantins, which are bordered with/ beautiful groves of asai [sic; açaí] and niniti [sic; miriti]29/ palms standing knee deep in water./ Just at night we stopped at the little/ village of Brevis [sic; Breves] on the island of/ Marajo [Marajó]. This place is said to be quite/ a center or rubber trade, but it looks/ poor and sickly and the tottering mud/ houses appear ready to slide down the/ low clay banks upon which they are/built into the river. During the night/ we passed through the Tagipuru [sic; Furo do Tajapuru], one/ of the channels that connect the Am-/azon with the Tocantins. It is quite/ narrow but deep, and with others/ must carry a large part of the water/ of the Amazon down the south side/ of the island of Marajo [Marajó], making Para [Pará]/ river one of its real mouths. Upon/ the morning of the second day we/ broke out into the real Amazon but/ so filled with islands that I could get/ no idea of its width, though I could/ often get glimpses as far as I could/ see. The river is probably about fif-/teen miles wide here but the Brazil-/ians say that if it were not for the/ islands it would be an ocean. About/ noon we stopped in front of Gurupa [Gurupá]. With its pretty church on the bluff and/ a funny little stone fort³⁰ that perhaps/

had a name in the history of the re-/bellious times of thirty or forty years/ ago, but it is now dismounted and/ nearly hidden under the growth of/ vines that have sprung up and around it. The town is built upon a ridge/ of red sandstone twenty or thirty/ feet in height and much like that/ found in Para [Belém], but this soon fades/ again in low flooded woods and/ prairies. In the evening we turned/ into the Xingu, a river as broad as/ the Ohio, that comes down from the/ provinces of Goyaz and Minas Geraes/ on the south, and stopping at the/ town of Porto do Mos [sic; Porto de Moz], which I could/ not see for the darkness, we unloaded/ considerable [sic] of our cargo into small/ trading schooners, that carry it up to/ the campos of the rubber gatherers/ above. The night was quite dark and/ during our return to the Amazon, through a side channel, the pilot lost/ his way and we passed the night/ anchored in six or 7 feet of water, but/ these steamboats are made flat bot-/tomed for such emergencies, and we/ did not ground. After we had again/ reached the Amazon opposite the vil-/lage of Almerim [Almeirim], we began to see/ flat topped hills or mountains on the/ north at a distance of five or six/ miles from the river. These appear/ to rise up uniformly to a height of four/ or five hundred feet, and the captain/ told me that they extend off to the north in great plateaus, so that it/ seems as if the whole country has/ formerly been at this level and the/ Amazon has cut its mighty valley/ through it. We were in sight of/ these hills all day long, some of them/ appearing to have but a few acres or/ a small farm of level land on top,/ while others reached along for sev-/eral miles unbroken./

On the morning of the forth day/ we woke up in front of the town of/ Monte Alegre, a pretty place built at/ the foot of the hills, and at the mouth/ of a clear pretty little river that just/ gave our steamer room to turn about./ Part of the place is built along a/ beautiful looking church through the/ trees on the hill above. A broad/ sandy road led winding up this and/ along it several yokes of oxen were/ drawing a part of our cargo upon/ funny little low carts, the axels of/ which revolved with the wheels. Af-/ter leaving Monte Alegre, the moun-/tains disappeared on the north but/ soon others came in sight on the/ south that appear to be part of the/ same system. As we approached the/ mouth of the Topajos [sic; Tapajós] the banks of/ the river seemed to rise a little, though/ yet hardly out of the water, and signs/ of civilization began to appear,

of 1888 he died. The Museu Paraense, after many drawbacks, originated the Museu Paraense Emílio Goeldi.

²⁹ Miriti - Mauritia flexuosa (Arecaceae).

³⁰ The Forte de Santo Antônio, actually located at the Ilha Grande de Gurupá, in the left bank of the river; the city of Gurupá proper is on the right margin. The fort was originally built in the beginning of the 17th century by Dutch invaders. It was taken in 1623 by Bento Manuel Parente, destroyed and then reconstructed. It suffered several attacks in 1629 and 1639, both by the Dutch and the Portuguese, In 1690 it was reconstructed by order of Governor Antônio de Albuquerque Coelho de Carvalho. Further reforms were made in 1760 and

^{1774.} Finally, as it lost its importance in the defence of the region, it was abandoned and reduced to some ruins, as Steere remarked.

and/ soon the shores were nearly covered/ with banna [sic; banana] trees and cacao orchards./ The river below must appear much as/ it did three hundred years ago, a lit-/tle palm-thatched hut and a canoe/ tied to the bank at rare intervals be-/ing the only signs of occupation. The Amazon was now free from is-/lands in some places and appeared to/ be from five to seven miles broad, its/ surface covered with eddies and foam/ as if very rapid, but the continued/ breeze that blows up stream may add/ to this appearance. In the afternoon/ we turned into the mouth of the Ta-/ajos [Tapajós], a large river a mile and a half/ wide, whose clear dark green water/ is in marked contrast with the yel-/low water of the Amazon. For quite a distance the waters of the two riv-/ers run along together without ming-/ling, but these yellow spots appear in/ the green and soon the Amazon swal-/lows up the whole without appearing/ a whit clearer. After stearing [sic] a few/ miles up the Tapajos we arrived at/ this city of Santarem [Santarém]. It appears/ from the water to be a well built and/thriving place with many trading ves-/sels in port and the beautiful beach and dry streets seemed pleasing/ enough after so long a stay in the/ low lands, where I had almost come/ to think that all Brazil was under wa-/ter at this time of year./

Back of the city a sandy plain or/ campo reaches to the foot of the/ mountains upon which the American/ colony under Colonel Hastings³¹ settled/ a few years ago./

Upon my arrival I experienced the/ truth of the old proverb that "famil-/iarity breeds contempt". The name/ of America has heretofore been my/ passport and security for good treat-ment, but here where the Brazilians/ have been acquainted for several/ years with the colonists and the shift-/less class of adventurers, which such/ enterprises always bring in their train,/ it is not considered much of an honor/ to be an American, though some of/ them have won the respect of this/ people by their honesty and steady/ industry. I expect to remain here/ among the Americans for a month/ and then move on up the river./

J. B. STEERE

Letter XIX [Peninsular Courier and Family Visitant, 10(32), August 25, 1871]

FOREIGN CORRESPONDENCE//

Number XIX//

TAPEIRUHA [sic; Taperinha], June 28th, 1871/

set out for California, arriving at Sutter's Fort on Christmas Day. After spending the winter there, Hastings left the fort on April 11, 1846, heading east with another small group. He and two companions stopped at the Sweetwater River, where they waited for the year's emigration to arrive. An eastbound traveler agreed to carry Hastings' open letter to emigrants on the trail, inviting them to meet him at Fort Bridger. From there, Hastings said he would lead them on a new route that would significantly reduce the time and distance. Sixty to seventyfive wagons traveled with Hastings on this cutoff and arrived safely in California. Hastings's dream of empire soon collapsed when California was conquered by the United States military during the Mexican War. In 1848, Mexico ceded California to the United States under the Treaty of Guadalupe Hidalgo. After serving as a captain in the California Battalion during the Mexican War, Hastings again took up the practice of law. He married Charlotte Toler in 1848 and was a delegate to the California state constitutional convention in 1849. In the late 1850s he moved his family to Yuma, Arizona, where he served as postmaster. During the Civil War, Hastings sided with the South. In 1864, he traveled to Richmond, Virginia, where he met with Confederate President Jefferson Davis to gain his support for a plan to separate California from the Union and unite it with the Confederacy. However, the so-called Hastings plot came to nothing, as the war ended early the following year. After the end of the war, many disgruntled Confederates left the United States to establish colonies in Brazil. Hastings visited the region, made arrangements with the Brazilian government, and wrote The Emigrant's Guide to Brazil to attract potential colonists. He died in 1870, aged about 51, at St. Thomas, Virgin Islands (possibly of yellow fever), while conducting a shipload of settlers to his colony at Santarém.

³¹ Lansford Warren Hastings (Bagley, 1994; Bandeira, 1973; Cumming, 1998; Dawsey & Dawsey, 1995; Griffin, 1981; Guilhon, 1979; Harter, 1985, 2000; Hill, 1927, 1935, 1936 [the latter two papers with an excellent review of the antecedents of the confederates' migration to Brazil]; Muniz, 1916; Weaver, 1961) was born in Mount Vernon, Ohio, c. 1819, the youngest of eight sons born to Dr. Waitstill Hastings and Lucinda Wood. The Hastings family fled to Mount Vernon from their northern Ohio home after the 1812 Hull Surrender to escape the Indians; and they returned to their home in Erie County by 1820. Lansford was reared, educated, and admitted to the bar in the same state. He traveled overland to Oregon in 1842. While there, he briefly represented Dr. John McLaughlin, preparing his land claim near Willamette Falls and surveying Oregon City, Oregon (which would become the first incorporated city west of the Rocky Mountains). He left in the spring of 1843 for California, then a sparsely populated province of Mexico. By the time he returned to the United States in 1844 he had decided to wrest California from Mexico and establish an independent Republic of California, with himself holding high office. Hastings wrote The Emigrant's Guide to Oregon and California to induce Americans to move to California, hoping they could effect a bloodless revolution by sheer numbers. He described California in glowing terms and gave practical advice to overland travelers. Published in Cincinnati in the spring of 1845, Hastings's guide did influence emigration to California, though not to the extent he had hoped for. In August of that year, Hastings and a small party

As soon as I arrived at Santarem [Santarém] I/ made enquiry for Americans, and was/ directed to the house of Dr. Weth-/erly [Wetherley] the only one resident there, whom/ I found all ready to start for this/ place. As he assured me of a wel-/come and a good locality for collect-/ing I closed with his offer and moving/ a part of my luggage into his boat/ we set out the same evening. The/ boat was overloaded and I passed/ the night in trying to find the most/ easy position for sleep across a bar-/rel; but morning came before I had solved the problem, and just when we/ drew up at the port of Taperiuha [sic; Taperinha], our/ destination, a large sugar estate be-/longing to Mr. Rhome³² and

32 Rhome – . Romulus John Rhome was born on March 7, 1935, in Frankfort, Herkimer, state of New York, being the second child of Peter Gremps Rhome and Nancy Almira Crandall Rhome. In 1837 the family moved to Richmond, Virgínia, where, on November 22, 1837, Romulus' brother Byron Crandall Rhome was born. The Rhome family, in the year 1840, was in Camak, Warren, Georgia. Upon Mrs. Rhome's death, on August 25, 1840, in Camak, the family moved again, this time to Jacksonville, Cherokee County, in Colorado, in the beginning of 1950. Peter G. Rhome was economically very well succeeded and became a great landowner, besides operating a mercantile business in Jacksonville. With the oucome of the Civil War, Peter became the representant of Cherokee County in the Secession Convention. Romulus J. Rhome joined the lst Infantry of Texas in the spring of 1861, as Second Lieutenant, and served at the "Hood's Brigade" of General Lee's army. He took part in the Masnassas battle. As he became ill, he had to return to Texas. Byron joined the 18th Infantry of Texas, Company K, of Jacksonville (Cherokee County, Texas) in July, 1862; he served in the Division of General Walker, in the "Trans Mississippi Department", passing the years of war in Louisiana and Arkansas; he began as First Sargeant, afterwards passing to Second Lieutenant, bering finally promoted to First Lieutenant. He was wounded at the battle of Opelousas, but continued in active service until the dismissal of the 18th Infantry in Hempstead, Texas, in May, 1865. Romulus got married, in an unknown date, to Missouri Robertson Rhome, and both decided to migrate to Brazil in 1865, to establish themselves at Santarém, Pará. Byron Crandall Rhome married Ella Elizabeth Loftin, on August 31, 1864, in Cherokee County. In 1876 he moved to Wise County, where he reared cattle. His wife died in 1879, probably of typhoid fever. Byron Crandall Rhome died on November 10, 1919, in Fort Worth,

After the Confederates' arrival in Santarém, Miguel Antônio Pinto Guimarães [see next note] formed a society with Romulus John Rhome, for the development of the Fazenda Taperinha. In 1882, the Barão de Santarém died; a little before he had broken the partnership with Rhome. Missouri Robertson Rhome, the wife of Romulus John Rhome, died in Santarém on February 23, 1884. The couple had only two sons, Romulus John Rhome Jr. and Byron Rhome. The first was probably married, as there are references to "some girls", possibly his daughters, in the journal of Pastor Hennington. Romulus Jr. died tragically, of a firearm accident, in 1887. Mr. Rhome died in Santarém in 1887. In the following year, his son Byron went back to the United States, as his entire family in Brazil had died.

Colonel Pinto³³ in partnership. The former/ an American from Texas; the latter/ a Brazilian and at present acting pres-/ident of the Province of Pará.

Mr. Rhome the resident partner re-/ceived me with a hearty Western/ welcome that made me feel at home/ at once.

I was pleased to see a large space/ in front of the house devoted to flow-/ers, which are rarely seen in this/ country except such as nature, unas-/sisted, hangs on the vines and trees,/ among these were beautiful roses and/ dahlias mingled with others that are/ not seen at home except in green/ houses. Captain Tavores [sic; Tavares] on our trip up the river told me of several kinds/ of flowers that he had been able to/ raise successfully only by the free use/ of ice; among them pausies [sic; pansies] and some/ kinds of roses, thus completely in-/verting our method.

The house, sugar mill, orchards,/ etc; of the estate are at the foot of/ the mountains, upon a narrow belt of/ rich sandy soil, that seems to have been washed from the hills. A few/ rods back of the buildings the moun-/tain rises up to a height of four to/ five hundred feet and so steep that the road has to wind about for a/ long distance before reaching the top. Soon after we arrived we rode/ up to see the field of sugar cane and/ tobacco upon the table lands above,/ and, though we had called it a moun-/tain from below, after seeing the/ level timbered lands extending to the south beyond the knowledge of any/ of the people here, it seemed plain to/ me that this was the former level of/ the country and that the Amazon had/ cut out the immense valley we could/ now see far below us with here and/ there an arm or igaripe [sic; igarapé]

H. S. Smith (1879) published an excellent account about Taperinha and its prosperous situation under Rhome.

Miguel Antônio Pinto Guimarães, the future Baron of Santarém (cf. Meira, 1976; Vasconcelos & Vasconcelos, 1918) was born in the village of Santarém, Pará, on June 8, 1808; his parents were Miguel Antônio Pinto Guimarães and Tereza Joaquina de Jesus. Although very short (not more than a meter and a half of height) he was endowed with an extraordinary enrgy and capacity of work. The first time his name has been heard, according to Meira (1976: 9), was as a participant of a meeting organized by the military commander João Batista da Silva, sergeant-major of the 4th Regiment of Infantry of the 2nd Line of the Army, on September 16, 1831, to discuss the defense of Santarém against the rebels in favor of canon Batista Campos, then in rebellion. He was encharged of the command of a body of workers and subsequently served in various official positions, finally receiving the Împerial Order of the Rose and becoming Vice-President of the Province of Pará. He owned several properties and farms in Santarém, Prainha and Monte Alegre, and the Fazenda Taperinha. On January 6, 1845, he married Maria Luiza Pereira In 1871 was honored with the title of Baron of Santarém. He died on August 16, 1891, eighteen months after the death of his wife, leaving eight children.

winding/ about through the prairies, and be-/yond, the great Amazon itself, with/ its waters yet muddy from excava-/tions still going on.//

The soil of these table lands is a/ rich clay loam with a subsoil of red-/dish clay. Sugar cane and tobacco/ grow with the greatest luxuriance and/ I saw some cane, that was so thick/ and tall that it was perfectly impos-/sible to go through it. This was/ where Mr. Rhome had used the plow,/ an instrument the native know noth-/ing of, though they cannot but won-/der at its effects.

The hands, Indians and slaves/, were cleaning off the logs and brush/ from new land and planting tobacco/ and the thorough way in which they/ did their work showed that their mas-/ter was trained in a more thorough/ school of farming than is found in/ this country.//

Upon this tableland, there is a large/ orchard of cacos [sic; cacao]. from the fruit of/ which our chocolate is made. The/ cacao is generally planted upon low/land where it is nearly or quite flood-/ed in the winter but it seems to be/ doing well here, in spite of its ele-/vation. The tree grows to a height/ of fifteen or twenty feet and is not re-/markable in appearance, but the/ fruits look just like musk melons and/ grow on short stems all along the larger branches, but never upon the small branches and new wood as with most fruit. The fruit is gath-/ered when yellow and ripe and the/ seeds dried for use; the seeds are/ like large beans twenty of them per-/haps growing in one fruit and are covered with a juicy, acid pulp, that is very pleasant to eat and makes/ god lemonade.//

Mr. Rhome pointed out a number/ of large spots of several acres each/ which are called black lands. The/ soil of these is deep and very black/ and perfectly filled with pieces of/ pottery, and broken stone hatchets/ etc.³⁴, so that one can not dig a place/ to set a tobacco plant without draw-/ing out several of them; while in the/ common soil of the mountains they are of rare occurrence. I immedi-/ately made up my mind that the/ black lands were in fact the an-/cient sites of Indian towns and that the blakness of the soil was due to/ the offal gathered together by a large/ population and to the decaying palm/ leaf roofs of perhps many genera-/tions of people, and taking a spade/ up to the mountain a few days after-/ward, I found that the black soil was/ in many places three

and four feet in/ depth and containing pieces of pot-/tery all through it. I also found pieces of kneaded clay at that depth,/ just such as the walls of nearly all/ the houses upon the Amazon are/ made of at the present day.//

The pieces seem to be generally/ those of cooking utensils, but after/ considerable digging I found a jar/ that had been used apparently to bury/ in, but it was so old that I could find/ no signs of bones and it fell to pieces/ upon being lifted out. The same con-/glomerate rock and red sandstone that/ I have seen everywhere yet in Bra-/zil, crops out along the hill side, and/ I find [sic] many beautiful pebbles of/ quartz that seem to result from the/ same stone worn to pieces by the/ water.//

I have killed about fifty birds some/ of them very beatiful and have/ made my way into the woods far/ enough to see the great tracks of the/ anta or taper [sic; tapir]. The animals appear to/ be the same as at Para [Belém] but the birds/ are quite different.//

On the evening of the twenty third,/ I heard the tuning of violins and banjos and other sounds that betoken a/ coming feast-day, and was told that/ to-morrow was St. John's day. At/ the closing of prayers and the singng/ of the ora pro nobis, several of the/ slaves and Indians entered the house/ and tied red ribbons upon the arms/ of my host and the Doctor, both of/ whom are blessed with the name of/ John. If some one else should not/ untie the knot and take upon himself/ the burden, the one tied owes a present to the one that tied him. After/ this I heard considerable noise out-/side, and going to the door, found/ they were jumping over three large/ fires they had arranged in a row near/ each other. This ceremony, when/ three times repeated, is said to insure/ good health till next St. John's day./ The Indians and negroes who had/small children, were jumping over the fire with them in their arms. The/ girls generally got some young fellow/ to go with them, but the old negro/ women had to go through the ordeal/ alone. They were all, old and young,/ bare-footed, and it seemed rather/ warm sport, especially for the girls/ and women, who drew up their dress-/es, thinking it better to burn their/ ankles than something that would not/ mend so easily. One poor lame fel-/low hobbled through, seeming to de-/sire health as much as the rest. Fi-/nally an old hunter who had been of/ some assistance to me, came and said/ that if four should go through together/ it would be bem seguro (very certain),/ and so to make up his number I went/ through the fire with the rest, so that/ my health is assured till next St./ John's day.//

³⁴ The archeological site at Taperinha was first described by Hartt (1885: 10-14. in the section "Taperinha e os sitios dos moradores dos altos"); he also described some archeological artifacts from the same place at pp. 50-52 ("Idolos dos moradores do alto") and pp. 61-62 ("Louça dos moradores dos altos") in the same paper.

I shall soon make my way to Dia-/mantina where several American fam-/ilies are settled, and you will likely hear from me there next time.

J. B. STEERE

Letter XX [Peninsular Courier and Family Visitant, 10(34), August 25, 1871]

FOREIGN CORRESPONDENCE//

Number XX//

SAUTAREM [sic; Santarém], BRAZIL, July 23th, 1871

I returned here yesterday from Mr./ Rhome's, having spent thus nearly all/ the month that I had allotted to Sal-/tarem [sic; Santarém] and its vicinity, then, and mak-/ing it impossible to visit the other/ Americans who are settled upon the/ mountains more directly back of the/ city.//

While at Toperinha [sic; Taperinha] I examined a/ bank of shells³⁵ that is upon the sandy/ strip of land at the foot of the moun-/tain, but not far from the low land, or/ (varzia) [sic; várzea] as it is called here, which is/ overflowed during the rainy season./ The bank is forty or fifty feet broad/ and six or eight deep in the center,/ where it is bare of earth; but at the/ edges it is covered by the same sand/ that forms the soil of the vicinity. By/ getting into a pit from which shells/ had been taken to burn into lime, I/ had a good opportunity of examining/ the bank closely. The shells appeared/ to be mostly bivalves and of but three/ or four species³⁶, though I found one or/ two small Melanias or something of/ that sort. The shells were almost/ entirely free from earth or sand, and/ the valves are generally separated./ While collecting some of the better/ preserved ones, I found several pieces/ of broken pottery at various depths,/ closely imbedded among the shells,/ also a rib of the peixe boi and various/ angular

pieces of rock, all going to/ prove that this is not a natural forma-/tion, but a real 'shell heap', such as/ have been found in various parts of the United States and Europe, and/ are supposed to have been made by/ the ancient races of men, who ate the/ shell-fish and cast the shells into heaps./ This shell heap may have been the/ port of the city upon the mountain/ just above, and though it is now sev-/eral feet above high water, at the time it was made it was probably on the beach of a great shallow lake that extended to the Amazon on the north, where now there is a broad, grassy/ prairie, just covered with water dur-/ing the rainy season, and with here/ and there igarape [igarapé] or stray channel of/ the Amazon winding through it. A/ lake of this kind would be a favorable/ location for such shells, and it is only/ upon some such supposition that I can/ account for this great bank of shells/ in a locality where they are at present/ very rare. A part of the shells were/ glued together and changed in color,/ apparently from the action of fire, but/ through crumbling to pieces with age,/ the most of them still retained their ancient forms and colors. They ap-/peared to be fresh water shells, and/ of a species still existing in the Ama-/zon.//

I had here my frst opportunity of/ observing the famed sauba ants³⁷, though they are quite common all/ along the Amazon. They seem to/ delight in excavations, and their nests/ can be easily found by the cart loads/ of earth thrown out, and by the/ smooth, well beaten paths leading to-/ward them. The as-ú bas [sic; saúbas] are of a red/ color, and several sizes are found in the same nest - the larger ones being provided with huge heads and jaws that seem to be a load for them to/ carry. I found one of their paths/ one morning in the caju³⁸ orchard, along which they were moving in thousands,/ some of them being engaged in strip-/ping an orange tree of its leaves,/ while others were cutting to pieces and/ carrying home the large violet petals of a wild pea. The path, which was/ four or five inches wide, was perfectly/ covered with ants all carrying there/ pieces of green and violet leaves, up-/right in their jaws, so that it appear-/ed a miniature army, marching with/ banners. I followed this path up the/ hill to their city, which covered se-/veral square rods, where this stream of/ green and violet was pouring into the/ earth. The pieces were generally out/ of the crescent or triangular-shape and/ were carried by the larger ants, while those of a smaller size seemed to be/ riding back to the nest, perched upon/ the burden of their larger brethren,/ sometimes three

³⁵ The *sambaqui* (shell-midden) of Taperinha was described by Barbosa-Rodrigues (1875: 35-43), who visited the farm in the year 1871; also by Hartt (1885: 2-6), who visited it in 1870 and in June 1871, and Smith (1879). See also Rosevelt, Housley, Silveira, Maranca & Johnson, 1991.

³⁶ The shells found in the sambaqui of Taperinha all belong to the family Hyriidae and to the genera Paxyodon (probably Paxyodon syrmatophorus (Meischen in Gronovius, 1781)), Castaloa and Diplodon, according to the identification of Dr. José Paulino Soares de Souza, based on material collected by N. Papavero in May, 2003, and deposited in the Museu de Zoologia da Universidade de São Paulo.

³⁷ Atta ssp. (Hymenoptera, Formicidae).

³⁸ Caju – Anacardium occidentale (Anacardiaceae).

or four upon one/ piece of leaf. Upon climbing the/ tree I found that they are at work in/ the very tops, where the leaves were/ young and tender. The large jawed/ ants seemed to do the work of cutting,/ as well as conveying, using their jaws/ as shears. They stood upon the upper/ side of the leaf, and cut out pieces as/ large as one's thumb nail in a few/ minutes. They made a noise with/ their jaws while cutting that could be/ heard several feet distant. The little/ ants that I had seen below riding/ home on the pieces of leaves, were/ here in the tops of the trees, and/ seemed to be very much interested in/ the operation, though I could not see/ that they were doing anything unless/ it was to help the larger ants in get-/ting the pieces loaded and well bal-/anced, and I am half inclined to be-/lieve that they came out and climbed/ the tree simply for the sport of riding/ back, just as schoolboys climb the/ hill with their leds for the pleasure/ of riding down. At the nest a large/ number of the little fellows were em-/ployed in the more staid business of/ carrying out dirt. The males and/ females, which come out at certain/ seasons to found new colonies, are/ much larger and are often eaten, hav-/ing a spicy taste which is not at all/unpleasant.

Just as I was ready to go to Sal-/tarem [sic; Santarém], Mr. Rhome offered me his help/ in collecting a set of woods from the/ estate and with several of his Indians/ best skilled in woodcraft in the forest,/ gathering the different kinds, after/ much hewing and planing, we gath-/ered together nearly seventy species,/ many of them beautiful and valuable/ for cabinet work and for ship build-/ing, etc., etc. Among the trees famed/ here is the Castauha [sic; castanha], or Brazil nut³⁹,/ the leaves and general appearance of/ which is much like that of the chest-/ nut. Ten or twelve of the dark, tri-/angular nuts that we get in the States/ grow inside a case or nest that is six/ or seven inches in diameter, and so/ hard that it takes a good smart blow/ with an axe to crack it. The Indians/ gather these nuts together, a few at a/ time, and bring them into the towns/ along the river, from whence they are/ shipped to Para [Belém], and thence to foreign/ ports, being often shoveled loose into/ a ship's hold. There is another nut/ here called (castauba [sic; castanha] sapucaia)40 that/ is considered much superior to the/ one exported, but it has not yet be-/come an article of commerce. These/ nuts grow inside a large case that has/ a lid which drops off when the nuts/ ripen allowing them to fall out.//

I found here at Mr. Rhome's four/ of the ill-fated Bolivian Expedition,/ which fell to pieces somewhere above/ Manaos leaving its members scattered/ all along the Madeira and Amazon,/ many of them without means to get/ back to the States. Those who are/ here are raising tobacco and with a/ good prospect of success. Among so many Americans I felt almost as if/ at home, but I have likely seen nearly the last of them until I reach the Pa-/cific coast. I go to Obidos [Óbidos], one hun-/dred and fifty miles above here, tomorrow.//

J. B. STEERE

Letter XXI [Peninsular Courier and Family Visitant, 10(39), September 29, 1871]

FOREIGN CORRESPONDENCE//

Number XXI.//

OBIDOS [Óbidos], BRAZIL, July 28th, 1871

On the evening of the seventeenth/ I found myself once more on the/ steamer Obidos [Óbidos] bound up the river./ Before morning we had left the high/ lands about Santarem behind us and/ were again passing between low banks/ heavily covered with low trees and/ vines and bushes. Here and there/ along the water's edge were orchards/ of cacao, and the huts of the owners/ with the platform on one side for dry-/ing the cacao, and a heap of the/ brown and yellow hulls of the fruit/ piled before the door were the most/ usual signs of life. Though the Ama-/zon with all its branches must now/ have twenty or thirty steamboats and/ perhaps several hundred small trading/ schooners, there are so few for its im-/mense extent that one may pass en-/tire days and see nothing more than/ a few small canoes, the same in form/ and occupants as navigated the great/ river before the time of Columbus./ Just before night we came to anchor in front of the place where the high/ land again comes down to the river/ on the north side./

The Amazon flows in a low level/ valley which seems to be from thirty/ to fifty miles wide in this part of its/ course. This valley is covered in some/ places by grassy campos or marshes,/ but more generally by a thick jungle/ and is all flooded during the rainy/ season; not as I supposed at first by/ the Amazon itself setting back over/ it, but by the rain water, which ac/cumulates in the valley itself and in/ the streams flowing into it too rapidly/ to be carried off by the Ama-

³⁹ Castanha-do-pará – Bertholletia excelsa (Lecythidaceae).

⁴⁰ Sapucaia – Lecythis pisonis (Lecythidaceae).

zon;/ thus differing entirely from the an-/nual flood of the Nile, which is caused/ by rains which fall at its sources far/ distant from the locality inundated./ The bed of the Amazon winds about/ in this great valley, touching the/ high land first on one side and them/ on the other and then flowing near/ the center out of sight of terra firma [sic; terra firme],/ as the Brazilians call it, on either side./

The river here in front of Obidos [Óbidos]/ is narrowed down from its usual width/ of three or four miles to a mile and a/ half, but it is said to have a depth of/ six or eight hundred feet. Though/ so deep it is quite rapid and goes/ rippling and eddying by carrying/ along trunks of trees and great/ masses of grass that it has torn from/ the banks above. This is the narrow-/est place in the lower river and was/ called Porta or the gate, by the Port-/uguese. The principal part of the/ city is built upon the bluff, sixty or/ eighty feet above the river, and lead-/ing up to this a street is cut through/ just such beds of clay and sand as are/ found at Maranham [Maranhão] on the sea coast,/ and which seem to hold a middle/ place somewhere between earth and/ rock, being too hard for one and too/ soft for the other. A little low stone/ redoubt⁴¹ on the beach with half a doz-/en old cannon, and two or three black/ soldiers lounging lazily across them/ keep guard over the row of shops and/ canoes along the water's edge, while a/ fort of more pretentions42 floats the/ orange [sic; yellow] and green flag of Brazil on/ the bluff above. The city shows little/ care for appearance in its builders. Each one seeming to have built as his/ convenience or means dictated./

Thanks to letters of introduction/ given me by Mr. Penna of Para, I/ have good accomodations with Dr./ De Mattos⁴³, a gentleman of color, but/ in this country no less a gentleman for/ that. He is a real lover of hunting/ and goes with me to the woods nearly every morning. Obidos [Óbidos] thus far/ proves to be altogether the richest/ place in the number and variety of/ birds that I have found on the Ama-/zon and I have already added three/ specimens of trucans [sic; toucans], three of wood-/peckers, and several creepers to my/ collection. Among others there is one/ very

beautiful parrokeet, called by/ the Brazilians the parrokeet of the/ Holy Spirit⁴⁴. The colors of the birds/ are so rich and varied that when I/ put the result of the day's hunt upon/ the table together they often look like/ a bed of flowers. Among the ani-/mals are many little squirrels that ap-/pear similar to the red squirrel at/ home, and several species of the/ smaller, softer haired monkeys. Those/ who are best acquainted with the ani-/mals and birds if the vicinity find a/ great difference among those of the/ two banks of the river, one instance/ being the guariba or howling monkey,/ which is red on one bank and black on/ the other./

Obidos [Óbidos] is a woodling port, and/ while watching under the fruit trees/ in the woods for birds, I often hear/ at a distance of falf a mile, the/ moaning, wailing sound of the carts/ used in drawing the wood from the/ forest to the river. As the noise in-/creases the birds take flight, and/ finally a yoke of oxen and cart come/ in sight, driven by a stout, rough/ bearded, bare-footed Portuguese, with/ a long stick sharpened at one end,/ with which he runs first to one side of/ his team and then the other to hurry/ them along and to guide them over/ the bad road. The yoke is fastened/ to the horns of the oxen by a strong/ band with a large pad on the fore-/head. The cart wheels do not have/ spokes and felloes, but are made/ nearly solid of great pieces of timber/ morticed and rimmed together, into/ which the axle is framed, so that all/ revolves together under the load. It/ is likely just such a turn out as could/ have been seen in Italy in the time of/ the Scipios and looks very much as if/ it had been handed down from father/ to son from that time. The axles/ seem to be selected for their musical/ qualities, and the carts like their/ owners may be known by their voices./ The Portuguese, to whom all such/ crafts as this naturally fall, do not/ learn anything new, but cling to the/ customs of their fathers, while Bra-/zilians, their direct descendants, are/ ever ready to take the advantage of/ all the inventions and discoveries of/ the day. The desire for improvement/ is not the only point of difference be-/tween the Portuguese and the Brazil-/ians, they differ very much in personal/appearance. The Portuguese is gen-/erally of good size and apt to be/ fleshy, with coarse thick hair and/ beard; while the Brazilian is small/ and sparse,

⁴¹ The Fort Pauxis, built in 1697.

⁴² The Fortress Gurjáo, constructed on top of the Serra da Escama.

⁴³ Probably Dr. José Veríssimo de Mattos, a medical doctor, member of the "Câmara Municipal" of Óbidos (1865-1868) and afterwards "Deputado à Assembléia Legislativa" of the Province of Pará, and father of José Veríssimo Dias de Mattos (Óbidos, April 8, 1857 – Rio de Janeiro, December 2, 1916), a celebrated Brazilian writer, educator, journalist and member of the Brazilian Academy of Letters; one of his books is "A pesca na Amazonia" (1895).

⁴⁴ According to Snethlage (1914: 157-158), the name "periquito-do-espírito-santo" applies to the following species of Psittacidae: Forpus crassirostris crassirostris (Taczanowski, 1883), Forpus passerinus cyanochloros (Schlegel, 1864) and Forpus paserinus deliciosus (Ridgway, 1888) (Psittaciformes, Psittacidae). For an explanation of this name ("of the Holy Ghost"), see Teixeira, 2000 and Papavero, Teixeira, Cavalcante & Higuchi, 2002: 236-238.

with fine soft hair, and/ hardly any beard. It seems hardly/ possible that living for a few gene-/rations in this country could have made/ such a difference./

Turtles⁴⁵ form an important article in/ the bill of fare here as the shells/ along the streets and about the/ houses demonstrate, and the shells/ themselves are put to quite a variety/ of uses. Every morning the servants/ of the different houses go by the door/ on their way to the common, with the/ sweepings and dust of yerterday in/ turtle shells upon their heads. Turtle/ shells are also used for hods in build-/ing and shovels for digging. They/ all have holes through them that ap-/pear as if made with a small chisel/ where the arrow with which they/ were captured entered. Bows and/ arrows are still in general use on the/ Amazon for catching fish and turtles,/ especially the latter, which are wary/ and hard to approach. The Indian,/ when he sees the turtle lying on the/ top of the water, though he never/ heard of conic sections, calculates his/ distance with more skill than an artil-/lery man and shooting his arrow into/ the air it makes its course and comes/ down perpendicularly upon the back / back [sic] of the unsuspecting turtle, the/ steel head piercing the shell and the/ long hollow shaft, which is connected/ very loosely to the head except by a/long line that is wound about it, comes/ out of the socket and floats on the/ water the line unwinding from it as/ from a reel as the turtle goes to the/ bottom. The shaft guides the fisher-/man to the spot and paddling his canoe directly over the turtle he/ draws him carefully into the boat./

Some most beautiful hanging orch-/ids are now in blossom, and I often/ wish there was a green house con-/nected with the University to which/ I could send a set of them./

J. B. STEERE

Letter XXIII [wrongly numbered; should be Letter XXII] [Peninsular Courier and Family Visitant, 10(41), October 13, 1871]

FOREIGN CORRESPONDENCE//

Number XXIII//

OBIDOS [Óbidos], BRAZIL, Aug. 10th, 1871

About the first of this month, hav-/ing done about all that I could do in/ this place, I made a trip

to the village/ of Faro. The maps of Brazil, just/ above Obidos [Óbidos] and coming in from/ the south in the direction of Guiana,/ show a little [sic!] river called Trombetas,/ and just above this and connected/ with it and with the Amazon by a/ chain of lake and furos, another call-/ed the Jamunda [Nhamundá] and upon this last/ river seventy or eighty miles from its/ mouth, is the village of Faro, on the/ back of a pretty lake through which/ the river passes./

We left Obidos [Óbidos] about midnight, on/ the little steamer Para [Pará]. It was a clear/ and beautiful night and we sat on the deck several hours watching the rip/ples of the Amazon as they sparkled/ in the moonlight. We were passing/ the mouth of the Trombetas, near/ which the ancient voyagers are said/ to have found the race of female war-/riors from which the great river took/ it [sic] name. The Trombetas is now the/ place of refuge for all the fugitive/ slaves of the vicinity and has a large/ Mocambo⁴⁶, as these settlements are/called in Brazil. There exist in the/ vicinity of nearly all the large towns/ in Brazil, at least the northern part/ of it, settlements of these fugitives, cut/ off entirely from law and religion and/ civilization, except through the rare/visit of the Portuguese traders, who/ brave almost any danger for the prospect of trading their poor wares, of/ which cachaca [sic; cachaça] forms a large part, at/ a good profit for the tobacco and bal-/sam copaiva⁴⁷ of these outcasts. At/ rare intervals, also some poor Ital-/ian Priest, in whom the missionary/ spirit still lives, pushes his canoe up/ the rivers until he finds their settle-/ments, to baptize and to administer/ extreme unction to these poor crea-/tures, only looking for reward in the/ world to come. I think it is Lieuten-/ant Herndon⁴⁸ of the

⁴⁵ Podocnemis expansa (Schweigger, 1812) (Reptilia, Chelonia, Podocnemididae).

⁴⁶ Mocambo - See Acevedo & Castro, 1998.

⁴⁷ Balsam copaiva – Copaíba – Copaífera langsfdorfii (Fabaceae).

⁴⁸ Herndon - William Lewis Herndon, naval officer, born in Fredericksburg, Virginia, 25 October, 1813; lost at sea, 12 September, 1857. He entered the navy as midshipman in 1828, and was promoted passed midshipman in 1834 and lieutenant in 1841. He served on various cruising-stations and was actively employed during the Mexican war. After three years of duty at the naval observatory he was sent to the South Pacific station, where in 1851 he received orders detaching him from his ship, and directing him to explore the valley of the Amazon to acertain its commercial resources and capabilities. He started from Lima, and crossed the Cordilleras in company with Lieutenant Lardner Gibbon, who separated from him to explore the Bolivian tributaries, while Herndon followed the main trunk of the Amazon to its mouth, returning to the United States in 1852. The report of this expedition was published by the government in two volumes, of which Herndon wrote volume 1 ("Explorations of the valley of the River Amazon") (Washington, 1853) [The 2nd volume was written by Gibbon, 1864]. This work was extensively circulated and is still cited in works of ethnography and natural

United States/ Navy, who came down the Amazon/ on an exploring tour a few years ago; [sic]/ who gives a very pleasing picture of/ slavery in Brazil, representing them/ as always fat and happy⁴⁹; but these/ Mocambos scattered all over the/ country, seem to prove that even in/ Brazil where the work is light and/ the pleasures many, the negroes/ prefer a life of freedom with all its/ privations to one of slavery. I made/ many enquiries about this special Mo-/cambo on the Trombetas and per-/haps the picture will do for all. They/ have gone above the first rapids on/ the Trmebetas [sic; Trombetas], so that troups sent to/ overcome them can not paddle to/ their very doors, but must march/ some distance through the woods,/ giving them time to prepare for de-/fence or to fly to the swamps. Above/ the rapids they are settled all along/ the river, with two or three consider-/able villages, and likely number be-/tween one and two thousand; though/ some estimate them much higher./ They seem to pass a very harmless/ life, living on their little farms or/ patches, where they raise mandioca/ and squashes and tobacco, the part/ of the latter which finds its way into/ the commerce of the country being/ held in high estimation./

history. In 1855 he was made commander. He took service in the line of mail-steamers plying between New York and the Isthmus of Panama. On Tuesday, 8 September, 1857, he left Havana in command of the "Central America" (an old steamer, formerly named the "George Law"), carrying a large number of passengers returning from California and gold amounting to \$2,000,000. The ship encountered a cyclone in the edge of the Gulf stream, and her back of water-tight bulkheads and general unseaworthiness allowed water to extinguish the fires, so that steam could not be used to keep the ship under control or to pump her out after Friday noon. The next day a small brig was signaled to stand by, and all the women and children were transferred to her in the three remaining boats. Herndon kept the boats from being overloaded, and preserved order on board to the last. He sent his watch to his wife, saying that he could not leave the ship while there was a soul on board. He took his station on the paddle-box when the ship was seen to be sinking, and made signals for assistance. At 8 P. M. the steamer went down. Some of those who remained on deck were picked up by passing vessels, after clinging to spars, but Herndon and 426 others were lost. His devotion to duty excited general admiration, and led his brother offices to erect a fine monument to his memory at the Naval Academy of Annapolis. A daughter of Commander Herndon became the wife of Chester A. Arthur, who was aftereward president of the United States. See also Junqueira (2007).

49 Herndon's statements about the negro slaves may be explained by the following paragraph of Bell's (1939) paper: "Two ideas lay behind the exploration of the Amazon River by Lieutenant William Lewis Herndon and Passed Midshipman Lardner Gibbon, of the United States Navy, in 1851 and 1852. The more important and the more frequently expressed was that the region of the Amazon offered a rich field for development by American commercial enterprise; the other was that the Amazon Valley might be employed as an oulet for the increasing slave population of the United States [italics ours]".

Their religion, from the lack of a/ priest seems to have really gone back/ to idolatry, though it does not lack/ much of this on many of the fazen-/das even. They gather together on/ the saints' day set apart by the/ Church of Rome, and worship the/ little wooden images of the saints,/ which they carried with them when/ they fled, as the ancients did with their/ household gods. After beating a/ drum and waving flags before these/ images and chanting their puayers [sic; prayers],/ they have a great feast and dance;/ which only ends when they are all/ well drunk on the fermented drink,/ they have learned to make of the/ Indians from the different prepara-/tions of mandioca; or upon poor/ eachaea [sic; cachaça] procured from the traders./ The Brazilian government has not/ allowed this waste of goods and chat-/tels in human form without efforts to/ retake them, and several expeditions/ have been fitted out to bring them/ back to labor and obedience. In/ some cases the soldiers have found/ them armed and ready to defend/ their homes, and skirmishes resulting/ in loss of life on both sides have taken/ place. In other cases the negroes/ fled to the swamps upon their ap-/proach and they found nothing but/ empty cabins to burn. The soldiers/ invariably came back unsuccessful,/ often losing a great part of their/ their [sic] numbers by the sizbens [sic; sezões] a dead-/ly form of chills and fever that is/ brouhgt on by exposure in the swamps/ which often kills upon the second/ attack. They brought back word/ of pitfalls dug in the paths, with/ sharp sticks set at the bottom; just/ such as the ancestors of this people/ made in Africa to trap the lion and/ the elephant. The result is that gov-/ernment has learned to ignore their/ existence and little is said about them/ except by those men who thus lose/ their property. One of my friends/ told me that he had fifteen slaves in the/ Mocambo, comprising several famil-/ies, which he heard had increased/ considerably in numbers since their/ flight. They sometimes make their/ way down to Obidos [Óbidos] and enter the/ town under the cover of the night to/ trade or to visit their old friends/ and relatives./

The existence of these places of/ refuge, undoubdtely work to the ad-/vantage of the slaves still under the/ power of their masters; who know/ that if too much work is required,/ or the lash is used too freely, they/ will wake up some morning to find/ their human property gone bag and/ baggage and with no hope of recov-/ery; but this very fact also conduces to the slow shiftless way in which/ everything is done here. If Mrs./ Stowe should come to Brazil and/ visit these Mocambos she could find/ plenty of material for new stories in/ the life and hardships of these poor/ people living

in deadly fear of the/ wild Indians on the one side and the/ no less dreaded Brazilian soldiers on/ the other./

We arrived at the little mud vil-/lage of Faro in the afternoon. It has/ four or five hundred inhabitants near-/ly all Indians and I had for a host/ a fine young fellow of the same/ race. His father, an old Indian of/ aldermanic proportions, had made/ considerable property by trade, dis-/playing almost Portuguese or Yankee/ tact in money making, now owning a/ store in the village and a little cattle/ estate near it. This young man had/ been to school and wrote a fine hand/ and had studied Latin and French/ for several terms; but his idea of/ countries and people were most woe-/fully crude. He wished to know of [sic]/ America, as this people persist in cal-/ling the United States, was a part of/Brazil, and if Portugal bordered upon/it and much more of the same sort, / showing the sort of education re-/ceived in this country. He gave me/ a long account of the appearances of/ spirits in the shape of hogs and/ tigers, that walked the streets at mid-/night, spouting fire from their eyes/ and mouths, also of a plant that when/transplanted to the quintal (the en-/closed place about the house) - would/ turn to a tiger during the night and/ make its escape. He had not seen/ the transformation though many had,/ but on making the trial had found the/ plant gone in the morning and the/ prints of the tiger's feet in the sand./

He also told me of strange invis-/ible birds that sing in the quintal/ just before the death of some mem/ber of the family. All these stories/ were fully corroborated by the old/ man his father, and other members of/ the family. He taught me several/ words of the Indian language and/ seemed to be very pleased when/ learning something of other countries/ or teaching me something of his, and/ I shall always remember Manduca/ and the few days spent with him/ with pleasure./

The ancient custom of eating/ with the fingers still prevails at Faro,/ each one putting his hand into the/ dish for the fish that suits him best,/ and then using his fingers to mix/ due proportion of red pepper and/ farniha [sic] when the same useful appen-/dages carry it to his mouth. After/ the meal a bowl of water and a towel/ are passed around to wash the hands,/ when the male members of the fam-/ily leave the women to finish what is/ left, which is often little but farniha [sic]./ Quite a party of us visited a little is-land in the lake which is occupied as/ a dormitory by several species of/ parrots. When we arrived about/ five o'clock in the afternoon, not a/ bird was to be seen; but just before/ sundown they came flocking in from/ all directions making such a scream-/ing and chattering that we could not/ hear ourselves speak. They paid/ little attention to our shooting and/ before dark we had killed between/ twenty and thirty, when we paddled/ back to the village by the starlight./ I spent in this way several days with-/out materially adding to my collect-/tion [sic], and with no other accident hap-/pening than getting lost in the woods/ and wandering about two or three/ hours, with a prospect of staying there/ all night, which was fortunately dis-/pelled by finding my way back to the village,/ where I hired a boat and my way/ down the river./

I stopped over night at (Largo [sic; lago]/grande,) another beautiful lake in the/ lower part of the Jamunda [Nhamundá]. The banks/ are six or eight feet above the level/ of high water, and would form a/ beatiful place for a setllement. The/ land is level and appears well adapted/ to cultivation, though it may prove/ rather light. If the soil is good it is/ a much better situation than the high/ lands about Santarem [Santarém] which are hard/ to reach, while here a steamboat/ could come to the very door./

I saw here for the first time the/ process of making pottery, a curious/ one and likely the same that has been/ used for generations by this people./ They mix the ashes of the bark of a/ tree called Caripó [?] with clay taken/ from the banks of the rivers or lakes/ until it is of the consistence of dough,/ when they work it out with the hands/ into little rolls six inches long and the/ size of one's finger. They then use/ a flat stone or something of the sort/ for a table and coil these rolls about/ each other pressing them together/ with the fingers and scraping them/ with a piece of wood or a shell until/ they have the bottom of the dish to/ suit them, them [sic] they build up the sides in the same way, laying on one/ roll after another until they have/ reached the required demensions [sic; dimensions]./ After they are nearly dry they polish/ them by rubbing them with a piece/ of wood or a smooth nut, when if/ they wish them ornamented they/ mark them with colored clays, and/ then burn them until they reach a red/ heat; while they are cooling they/ often rub them with the resin of the/ Jutai⁵⁰, which gives them a very per-/manent varnish. These vessels stand/ the fire well and ninety-nine one-hun-/dredths of the cooking done in this/ country is done in them. The whole/ process of making them put me much/ in mind of the dirt pies of my boy-/hood./

⁵⁰ Jutaí – Designation of several species of Hymenaea (Fabaceae): Hymenaea capanema Ducke, Hymenaea intermedia Ducke (Corrêa, 1984(IV): 593-594), Hymenaea courbaril L. ("jutaíaçu", cf. Corrêa, 1984(IV): 594-595), Hymenaea palustris Ducke ("jutaí-do-alagado", cf. Corrêa, 1984(IV): 595-596), Hymenaea parviflora Hub. ("jutaí do campo", cf. Corrêa, 1984(IV): 596) and Hymenaea oblongifolia Hub. ("jutaí grande", cf. Corrêa, 1984(IV): 596, 599).

As we paddled down the river we/ saw many masses of ash colored cot-/ton floating upon the water. This/ is from the tree called munquba⁵¹ [sic; munguba] a/ large tree with green bark which sheds its leaves annually, rather a wonder in this country. - While bare/ of its leaves, it flowers, they being/ large and cream colored, and with a/ strange and rather disagreeable odor./ The flowers are followed by red/ fruits, the size of large pears which/ open when ripe, allowing the cotton/ to be blown off by the wind or to be/ torn off by the parrots that eat the/ seed. The cotton is very soft and/ fine but appears to be short in staple/ and weak. The bank of these rivers/ are covered with the trees and may/ become a valuable article of com-/merce some time. The samauma⁵² [sumaúma], or/ cotton tree of the Indians is much/ larger spreading its horizontal bran-/ches over nearly half an acre in some/ cases. The cotton of the two trees/ appears quite similar but I have not/ compared them. We reached the Amazon at dark when the crew pad-/dled into the middle of the stream/ where the current was strong and fast-/ening the canoe to a floating mass of/ roots and grass, they went to sleep and/ we drifted on in the darkness. When/ morning broke we were in sight of/ Obidos [Óbidos]./

J. B. STEERE

Letter XXII

[wrongly numbered; should be letter XXIII]
[Peninsular Courier and Family Visitant, 10(40),
October 6, 1871]

FOREIGN CORRESPONDENCE//

Number XXII//

SANTAREM [Santarém], BRAZIL, Aug. 15th, 1871

Upon my return from Faro, Dr. de/ Mattos went with me to visit the cliffs/ on the river above Obidos [Óbidos]. There is/ a short curve in the river here, and/ the point formed by it is being con-/tinually worn away at the bottom, by/ the water, keeping the cliff nearly per-/pendicular. It is from eighty to one/ hundred feet in height and made up/ of beds of hardened sand and clay of/ various pretty colors, the brightest/

colored clays being often used for/painting. The beds are horizontal/ and a part of them at least appear to/ have been hastily formed; one bed/ near water level being made up of/ half rounded pieces of white clay/ with coarse sand. We examined/ very closely for fossils but found/ nothing that could with certainty be/ called organic. In several places/ where the water was dripping down/ from above, trailing pieces of fern/ and club mosses covered the face of/ the cliff. After several hours spent/ in examining the different beds we/ paddled back to town with the boat/ half full of pieces of rock and plants./ The next day the steamer was ex-/pected, but I had heard of strange/inscriptions upon the rocks of "Serra/ de Scama," [sic; Escama] a mountain just below the/ tower [sic, town] and determined to visit them./ The Dr. engaged a stone mason who/ had discovered the inscriptions to ac-/company me, and as soon as it was/ light we set out. We followed a cart/ road which led winding around and/ up the side of the mountain until we/ reached a height of four or five hund-/red feet; where we came upon great/ boulders lying all over the surface/ and extending into the mountains./ Several men were at work here mining/ the rock to pave a street in the city./ The rock is the same coarse red sand/ stone which is found about Para [Belém] but/ much firmer and better for building/ purposes. After going a couple of/ hundred feet farther we came out on/ top of the mountain which is nearly/ bare, the timber having been nearly/ all cut or burned off by the workmen./ There is here perhaps one acre of/ ground comparately level, but cov-/ered with the same boulders as/ found below, but almost all of them/ marked with strange characters;/ each boulder in general having but/ one inscription cut upon the smoothest/ surface whether on the top or side;/ but in some cases having two or/ more./

The only likeness to anything in the/ heavens above or the earth beneath,/ that I could make out among them/ was a figure of the sun, formed by/ three circles, one within the other,/ the outer one with four-teen rays/ rather irregularly placed about it./ There were other systems of circles,/ but without rays./

The other figures were some of/ them formed of strange curves and/ dots. Others with a curious system/ of lines and right angles, one line fol-/lowing another at a fixed distance/ through the whole figure much re-/sembling some of the curious puzzles/ school boys make upon their slates./

The figures are from one to three/ feet in length. The lines appearing/ to have been made with some blunt/ instrument being over an inch wide/ but very shallow. Though cut in the/ solid rock many of them are already/ so worn that their original forms can/

⁵¹ Munquba [sic] – Mungubeira – Bombax munguba Mart. et Zucc. (Bombacaceae) (Corrêa, 1984(V): 264).

⁵² Samauma [sic] – Samaúma or sumauma, Ceiba pentandra (Bombacaceae).

not be made out. There are perhaps/ thirty rocks thus marked, and all upon/ the very top of the mountain as if that/ spot had been particularly sacred./ Perhaps it was used as a temple and/ these figures of the sun were a part/ of their system of religion connect-/ing them with the sun worshippers of/ Peru. The other forms look as much/ like chacters of a written language/ as those of the Chinese, and many con-/tain the history of a people of ancient/ times. The mountain top with its/ extended view of the river and/ country about probably served as well/ for a lookout from which to observe/ the approach of enemies as for a place/ of sacrifice or divination. After ex-/amining the inscriptions as carefully/ as the time would allow, and for lack/ of pencil and paper copying a part of/ them upon leaves with the point of a/ pin, I went back to the town, and/ packing my things and bidding good/ bye to the Doctor and his wife - the/ kindest friends I have yet found/ among this people - I was soon on/ board the steamer Arong and on my/ way back to this place./

I expected to go up the river Top-/ajos [sic; Tapajós] from here, but finding Prof./ Hartt, of Cornell University here, and/ about to go down to Monte Alegre,/ near which place he has discovered/ many fossils, I go there with him to/ take a lesson in geology. He brings/ but one companion with him this time/ and intends carefully going over/ ground already examined by him,/ taking photographs to illustrate a/ series of articles he is about to write/ for the *Every Saturday*.

I have just heard of the death by/ yellow fever at Para, of my friend/ Mr. Lyman, with whom a made a trip/ to Soure on the island of Marajo [Marajó]. He/ was expecting to make another trip/ to the island and then join me at/ Santarem [Santarém]; but was taken with the/ yellow fever before he got away./ The British Consul and several Eng-/lish clerks also died of it, with/ quite a number of sailors in the harbor/ and many Portuguese resident in the/ city./

J. B. STEERE

Letter XXVII

[wrongly numbered; should be letter XXIV]
[Peninsular Courier and Family Visitant, 10(50),
December 15, 1871]

FOREIGN CORRESPONDENCE

Number XXVII

MONTE ALEGRE, BRAZIL, September 4, 1871. After several days of watching and/ waiting at Santarem, we finally went/ on board the steamer Obidos [Óbidos] at mid-/night of the nineteenth of August,/ and at eight o'clock the next morning/ we were at this place./

Professor Hartt set at work imme-/diately to get a canoe and men, and/ early on the morning of the twenty-first/ we were on our way to the mountain of/ Erené [sic; Ererê]⁵³, near which the Professor last/ year discovered a bed of Devonian/ fossils. We sailed up the little river/ upon which Monte Alegre is situated,/ but had gone but a short distance/ when, on turning a point, we came in/ sight of Erenè [sic; Ererê], twelve or fifteen miles/ distant, but rising up a great rough/ barren almost perpendicular crag,/ from the lower country about it, —/ After sailing six or eight miles we/ turned to one side into a narrow,/ winding igarapé, which led us part of/ the time directly back toward Mont/ Alegre, and the Indians taking down/ the sail paddled the rest of the way./

The banks were low and had just/ emerged from the flood, and they/ were covered with egrets and snipes/ and various other families of waders/ and swimmers, while above them/ perched in the low tree were many/ species of hawks, also watching their/ chance for a meal. In some of the/ low trees that hung over the water/ along this igarapé, I saw for the first/ time the curious nests of the perro-/keets d'Espirito Santo. These birds/ instead of burrowing in the nests of/ the white ants as the other perrokeets/ do, build themselves rude clay spheres/ about as large as one's head, with an/ entrance in the side. The only one/ we examined had been deserted by/ its builders and was occupied by a/ little finch much like our yellow bird./

Late in the afternoon we came to/ the port of the Indian village of/ Erené [sic; Ererê], the village itself being three/ miles away, at the foot of the moun-/tain. Here were three or four canoes/ tied to the bank among the bushes,/ and in one of them an Indian boy/ fishing. On the bank, a few feet above/ was a fire and an earthen pot placed over it upon some stones. A few palm leaves at one side sheltered a/ hammock that was hung between a/ couple of stakes, in which a naked,/ brown skinned, little fellow swung,/ while his mother cooked the fish over/ the fire. Back of these a few rods/ under the shade of some rude scaf-/folds covered with palm leaves or/ palha as it is called here - several In-/dians were at work building new and/ repairing old canoes for the coming/ fishing season which will be at its/ height in November, when the

⁵³ Cf. Hartt, 1872, 1878.

water/ is so low in the lakes and streams/ that the fish can be easily taken. All the native vessels on the Amazon that I have seen yet, whether trading/ schooners of twenty or thirty tons/ burden, or little fishing canoes are all/ made substantially after the same/ model. A narrow trough is first hewed/ out and shaped at the ends and is then/ spread open by fire, when end pieces/ and thwarts are put in, and, after/ calking with the pounded bark of the/ tree which bears the Brazil nut and/ smearing with native pitch, if the/ owner is too poor to buy that from/ abroad, the vessel is ready for service,/ unless it is wished larger, when side/ pieces are nailed upon the original/ casque until it is of the required size./

Loading our baggage upon our/ men's shoulders, we walked to the/ village over a rolling plain covered/ with coarse red gravel and small/ stones, which were not hidden by the/ bunch grass that grew among them./ A few low trees and great bunches of/ cactus twenty or thirty feet high gave/ the barren hills a beautiful but after/ all a strange appearance, after/ my long stay among the overwhelm-/ing vegetation that elsewhere has cov-/ered the shores of the Amazon. It/ seemed pleasant enough to be able to/ walk along without having one's feet/ tangled at every step with vines, or/ one's face and hands cut to pieces/ with thorns and cut grass. The/ mountain now stood up first before/ us, and we could plainly see the caves/ in its sides, and the curiously shaped/ masses of rock on the summit. We/ finally crossed a little brook and came/ into the straggling little village of fif-/teen or twenty palha houses, standing/ among groves of orange trees and near some springs that break out at/ the foot of the mountain. There were/ no enclosements about the houses, and no signs of civilization but the/ little whitewashed church with a bell/ hung in a frame beside it. We stop-/ped at the door of what appeared to/ be the house of the principal man of/ the village; there being an old Por-/tuguese two-wheeled cart in front of/ it under some orange trees, which/ proved his title to at least the two/ oxen necessary to draw it. This was/ when the Professor and his party had/ lived last year and though the propri-/etor was absent with his family at/ work in his patch of mandiocca, we/ made free to enter and make ourselves/ at home. Just at night our host Sen-/hor Liberato - a tall, lank Indian, with/ a little rough straggling beard upon/ his chin - returned, and his wife and/ daughtrer set about getting us supper,/ which consisted of farinha and dry/ salted fish boiled, with a bowl of the/ warm water in the fish was/ cooked, which served for a sauce/ after being well seasoned with red/ peppers and lemon juice. The meal/ was spread upon a mat

on the ground/ and we sat or lay around the edges of/ this as best we could, each one help-/ing himself until we had made a/ hearty meal, though we could not/ help mentioning the good things at/ home. We passed several days in/ this way, though the fish and farinha/ seemed to grow poorer, going out/ every day with bags and hammers/ breaking out the sand stones and/ shales which crop out upon the plains/ around and bringing back large num-/ber of fossils./

On the fifth day we concluded we/ would stand it no longer, and the/ Professor went out in the evening and/ came back with a chicken under his/ arm, but this did not seem to have/ any satisfying effect at all, and the/ next day we went in a body to the/ house of a young Indian woman who/ owned a small flock of sheep, which/ she did not seem to wish to part with/ but by our united powers of persua-/sion we succeeded in buying a lean/ red, grizzled fellow that did not/ promise much in the eating line, pay-/ing three dollars for it, a dollar apiece./ We then marched home in triumph, a/ little Indian boy dragging the sheep/ after us with a cord about its neck./ Our friends were all at the field at/ work and we could not wait for them/ to come back, so we concluded to kill/ and dress it ourselves, which we fin-/ally accomplished. Professor Hartt/ laboring at one leg with an old dull/ case knife as if he was about to un-/earth some new theory for the formation of the Amazonian valley. We/ then filled the big kettle with pieces/ of meat and throwing in plenty of/ salt and red peppers, and some garlic,/ we crowded the fire, and stood around/ anxiously waiting until it should be/ cooked enough to eat. It seemed an/ age in reaching this point, but every/ thing must come to an end, and we/ finally dished it out and began eating./ I do not wish to prejudice my reputa-/tion for truth-telling so that I will not/ state the amount of tough mutton we/ ate at that meal, and a catalogue of/ the songs sung and toasts proposed/ would not perhaps be interesting./

The next morning we started to/ visit the mountain, the Professor tak-/ing along his camera so as to photo-/graph some of the views from the/ summit. We passed by the springs/ which supply the village with water,/ which are in the midst of beautiful/ groves of palms of several species, and/ then came out upon a plain of deep/ sand that reached part way up the side/ of the mountain. This had been lately/ burned over, the fire running far up/ the mountain side and adding much/ to the natural barren appearance of/ things. Upon quite a portion of the/ mountain side the rock is perpendicu-/lar, but we found a pass, and after a/ good deal of hard climbing we ar-/rived at the top. Along the perpen-/dicular face of the rock there are/

many caves and we entered several/ of them, one of them appearing to/ have been used by a fox or some small/ species of ounce as a den. They/ were all filled with bats, and in the/ largest one we entered, which is/ thirty feet high and quite long so that/ it is called the church by the natives,/ there were so many that the noise/ they made in flying sounded like a/ large stream of water running over/ the rocks. Many species of small/ ferns were growing in the crevices of/ the rocks, but some of the most beau-/tiful were already killed by the dry/ weather. Upon the top of the moun-/tain there is a sandy plain, covered/ with bunch grass and low trees,/ among which are many cajus. There/ are many holes of one of the smaller/ species of armadillos, and many/ tracks of deer and tapirs, as if they/ had come up here to escape the hunt-/ing from below. The living rock/ rises up here and there out of this/ plain in curiously shaped crags, these/ taking in some cases the form of col-/umns or statues, often larger at the/ top than at the base. In one part the/ rock, which is a coarse white sand-/stone, is continuous for a long dis-/tance, showing strata that dip of to-/ward the Amazon with an angle of/ perhaps eight or ten degrees. Some/ of these rocks have curious figures/ painted upon them with some sort of/ red paint. Professor Hartt when/ here last year copied these end has/ already published them in the Ameri-lcan Naturalist54. Some of these that/ I saw here resemble those out in the/rocks upon Serra da Escama, at Mont [sic; Monte]/ Alegre, but the most of them are rude/ representations of the human figure/ and that of some of the animals⁵⁵./

From the top of the mountain,/ which is nine hundred or a thousand/ feet high, we had a splendid view of/ the river and country about us, and/ the plains over which we had been/ working were spread out at our feet/ like a map. At the north, distant/ perhaps forty or fifty miles, a long/ chain of table topped mountains rose/ up apparently to a height of fifteen/ hundred or two thousand feet on the/ south the table lands behind and be-/low Santarem upon which the Ameri-/cans have settled, were in plain sight./ We found a few specimens of fossil/ wood, and having made some collec-/tions of the different qualities of the/ rock and the Professor having finished/ his photographs, we went down, but/ much faster than we came up./

Professor Hartt generally spent his/ evenings in studying the 'lingua/ geral" 56 and in collecting the tra-

ditions of the Indians, going to the hut of/ some old man or woman, this language/ having nearly fallen out of use among/ the younger people here, and listening/ by the hour as they told stories of the/ spirits of the mountain and of the/ woods and the water, for they people/ these with as many spirits as the/ Greeks did. The origin of the "lin-/gua geral" seems to have been the/ following, though I have nothing but/ the account of certain of the Brazil-/ians: The Jesuits wishing the In-/dians to speak a general language in/ order that they might be the more/ easily taught the principles of Chris-/tianity, took the idiom spoken by a/ certain tribe of the great Tupi nation,/ which then dwelt all along the Amazon, and the sea coast, and enforced/ this in their schools and in all their/dealings with the Indians of what-/ever nation, meantime introducing/ into their language such words from/ the Portuguese as they considered/ necessary. Mr. Derby⁵⁷ and I accom-/panied the Professor on some of these/ trips, and one evening we heard the/ following story of the Curupiri [sic; curupira⁵⁸] which/ I think is a spirit of the forest which/ delights to lead belated hunters as-/tray. The Professor heard this story/ when here last summer, and has pub-/lished it, likely in much better form:/

⁵⁴ Cf. Hartt, 1871a, 1872, 1895, 1938.

⁵⁵ See Pereira, 2003.

⁵⁶ Cf. Hartt, 1871b.

Orville Adalbert Derby (Kellogsville, New York, July 23, 1851 - Rio de Janeiro, November 17, 1915) studied geology at Cornell University, obtaining his degree in 1873. While a student, he was invited in 1870 by his professor Charles Frederick Hartt to follow him in a study travel to Brazil (the Morgan Expedition), and returning again with him in 1871, this time going to the Tapajós river in the Amazon. Just after his graduation Derby accepted a post of assistant professor at Cornell and briefly substituted for Hartt during another travel to Brazil in 1874. In June of the same year, Derby got his doctoral degree with a dissertation on the Carboniferous Brachiopoda in the Amazon. When Hartt organized the first Geological Commission of the Empire of Brazil, Derby was nominated its assistant and returned to Brazil in December 1875. In 1877, with the end of the Commission, Derby decided to stay in Brazil and accepted a post at the Museu Nacional do Rio de Janeiro. He became also a member and director of the Geographic and Geological Commission of São Paulo from 1886 to 1904. This commission later originated the Instituto Astronômico e Geofísico da Universidade de São Paulo. Derby founded also the Botanical Gardens in São Paulo. In 1906 he was nominated to the Brazilian Geographic and Geological Survey. He worked in many domains of the geological sciences, such as mineralogy, economic geology, physical geography, cartography, petrography, meteorology, archeology and paleontology. He published 173 papers on the geology of Brazil from 1873 to 1915 and was also the publisher of the firsat geological maps of Brazil, in 1915. Derby never married and led a solitary existence, living mostly in hotel rooms. After the failure of an invitation by the state government of Bahia, he returned to Rio de Janeiro and committed suicide in a hotel room, on November 27, 1915, a few months after gaining Brazilian citizenship. He was 64 years old. Cf. also Gonçalves, 1952.

An Indian was out fishing, but/ after working all day had caught/ nothing, and was about going home in/ despair, when he saw a youth very/ short and small, drawing fish out of a/ deep hole in the stream, - every time/ he stooped down he drew out a fish, and the Indian began to have some/ suspicions that it was a spirit, but led/ by hunger he went up and asked the/ youth for some fish. The youth told/ him do draw out for himself, but he/ did not have much success, and the/ youth fished for him, drawing out an/ immense number and giving them to/ him. The Indian then sat down and/ began to make a very large basket to/ carry the fish home in, but the youth/ laughed and told him that would not/ hold half of them, and then made a/ very small basket himself and put the/ fish all into it and gave it to the Ind-/dian, telling him to be careful and not/ open it until he got home. The In-/dian then took the basket and started/ for home, but after he had gone quite/ a distance he began to be very curious/ how so many fish could be put in/ such a small basket, and finally sat/ down and opened the basket, when all/ the fish spread out upon the ground,/ and do what he would he could get/ but a very small part of them back/ again. So he finally made a very large basket and putting a part of the fish into it, he went home and told his/ story, but the people would not be-/lieve him until he took them back and/ showed them the rest of the fish/ spread over the ground./

We heard at the same time the fol-/lowing story of the tortoise and the/ ounce [onça], which I think Professor Hartt/ has also published⁵⁹:

The tortoise was out one morning/ after his breakfast, when passing un-/der an inaja [inajá⁶⁰] palm he heard some mon-/keys eating fruit, and said: "O, mac-/acos!" They answered, "O, jabutim!" and he said, "throw me down/ some fruit," but they only laughed/ and threw some of the stones of the/ fruit down on his shell, and told him/ if he wanted fruit to come up after it,/ but said he, "my legs are short and I/ can not climb, so come down and take/ me up." The macacos thought this/ would be a good joke, so one of them/ went down and the jabutim clung to/ his back and he climbed up the tree/ with him. When the jabutim had/ got fairly seated on one of the great/ fruits spathes and was ready to eat his/ breakfast, the macacos ran laughing/ off into the other trees, and said,/ 'now we shall see how he will get/down" The jabutim said he had eaten all he wanted and was then/looking around to see how he should/ get down, when an ounce passed un-/der the tree, and seeing the jabutim/ said, "O, jabutim!" and the jabutim/ answered, "O, ounce!" Then the/ ounce

asked "what are you doing up/ there?" and the jabutim said, "I/ was eating fruit, but I have eaten a/ plenty and now I wish to get down."/ "Jump down", said the ounce. "I/ will", answered the jabutim, "if you/ will catch me." Now this was just/ what the ounce wished to do, as he/ privately intended to make a meal of/ the poor jabutim. So he opened his/ mouth, and the jabutim cried "are/ you ready?" and down he came, striking the ounce on the nose and/killing him. The jabutim then walked/ home well satisfied, but a few days/ afterward, he said to himself, "the/ bones of the ounce must be well/ whitened by this time, I will go and/ get one and make me a flute." So he/ went to the inaja [inajá] tree, and sure/ enough, the bones of the ounce had/ been well picked by the (urubu) the/ vulture, and were very white. So he/ took one of the leg bones and went/ home and made him a flute.

As he was sitting one day at the/ door of his hole, playing on his flute/ "fee, fee, I play on my flute of an/ ounce's bone," an ounce happened to/ be passing near and hear him, and/coming out of the forest, asked,/ "what is that you are playing?" and/ the jabutim answered, "I was play-/ing 'fee, fee, I play on my flute of a/ deers's bone' "The ounce was hardly/ satisfied by this explanation, but said/ "if you play 'fee, fee, I play on my/ flute of an ounce's bone," any more/ I shall kill you." The jabutim prom-/ised, but the ounce went into the/ forest near and stopped to listen. As/ soon as the ounce was fairly out of/ sight, the jabutim went on playing/ "fee, fee, I play on my flute of an/ ounce's bone," when the ounce came/ dashing out of the forest to catch him. The jabutim slipped into his/ hole, but the ounce put in his paw/ and caught him by the leg. The/ poor jabutim braced himself against/ the side of the hole and hung on with/ all his might, but he was nearly tired/ out when a happy thought struck him/ and laughing out, he said, "O, ounce,/ what are pulling so hard at that/ root for?" The ounce thinking he/ must be pulling upon a root, let go,/ and the jabutim drew back laughing/ into a place of safety. The ounce/ was so mortified that he watched by/ the hole until he died of vexation/ and hunger./

The similarity between this story/ and those of the Germans in which/ the beasts talk with each other and/ play tricks upon one another is re-/markable./

After a second visit to the moun-/tain we packed our collections and/ came back here, Mr. Derby going in/ the canoe to take care of the speci-/mens, while we walked across the/ country, passing over stony and sandy/ plains unfit for cultivation. After a/ visit to Tujury, another mountain/ nearly north of this place, we shall/ return to Santarem.

⁵⁹ Cf. Hartt, 1875, 1952.

Letter XXV [Peninsular Courier and Family Visitant, 10(47), November 25, 1871]

FOREIGN CORRESPONDENCE

Number XXV

SANTAREM [Santarém], BRAZIL, September 6, 1871.

After our return to Mont [sic; Monte] Alegre from/ Ereri [sic; Ererê] we had considerable difficulty/ in getting men to carry our baggage/ to the mountain of Tajury [Itauajuri]⁶¹, the people/ generally being suspicious of us as/ they could not imagine that we were/ there for any other purpose than to/ find gold and silver, or to look out a/ plane for a colony. Many were the/ confidential questions asked as to/ how much and where we had found/ the precious metals, and one old In-/dian that the Professor wished to get/ as a guide, took the other view of the/ question and declared that he was/ not going to show his country to the/ Americans, to found colonies in. We/ got off finally on the morning of the/ first of September, with a guide and/

three men to carry our baggage. We/ walked ten or twelve miles across a/ sandy campo, covered with bunch/ grass, but too poor for cultivation,/ when we arrived at the village or set-/tlement of Sandoso [?], which is placed/ out here near the foot of the high/ lands where there is considerable/ timber and the soil is rich enough to/ raise mandioca. There were planta-/tions of several acres in extent, and/ the people seemed to be all busy in/ soaking, pressing and roasting farinha./ We stopped here to wait for our men/ to come up and to get our dinner,/ when we again set out, and after a/ couple of hours walk came to the little/ stream called Jacare [Jacaré], which is just at/ the foot of the mountain. There were/ a couple of old palha sheds here and/ good water, and we concluded to/ camp for the night and go up the/ mountain early the next morning./ We spent an hour or two looking/ along the stream for plants and rock/ and shells, while our men cooked/ supper, and then we set to work cut-/ting palha to make beds and gathering/ wood to smoke away the mosquitoes,/ which we had reason to suppose would be plenty at night. After thus/ getting everything ready we sat down/ and awaited our fate, the Professor/ setting the Indians to telling stories/ to pass away the time. Among the/ stories they told were the two folow-/ing which the professor collected last/ year and published on his return/ home⁶²:/

"How the Jabutim Proved his Strength"

A jabutim was at the sea-shore one/ day and said to the whale: "Oh Baleia, I am as strong as you are!"/ The whale made sport of him but the/ jabutim said "let me tie this vine/ around your tail and I will drag you/ out upon the land." So he tied the/ vine around the whale's tail and then/ said: I will go into the woods and/ when I am ready to pull I will tap on/ the vine and then you must pull with/ all your might, or I will pull you out/ of the water."/

The jabutim then went into the/ forest and finding a tapir, said to him/ "O Auta [sic; anta]! I am stronger than you/ are aud [sic; and] if you think I am not let me/ tie this vine around your leg and I/ will pull you into the water."So he/ tied the vine to the auta's [sic; anta] leg and/ then said to him, "O auta [sic; anta]! I will/ now go down to the water and when/ I tap on the vine pull with all your/ might or I will drag you in."Then/ the jabutim went down toward the/ water and tapped on the vine, when/ the whale dashed out into the water/ and dragged the auta [sic'anta] nearly down to/ the beach, and now

⁶¹ Derby (1878, 1879a: 167) thus described the Serras de Ererê and Itauajuri ("Tajury"): "Situated on the margin of the varzea, and about two leages to the westward of the village of Monte Alegre, there is an isolated group of mountains, consisting of numerous, small monoclinal ridges, separated one from another and disposed in an ellipse around a central plain, of which the elevation is a few feet at most above the level of the Amazonas. The major axis of the ellipse is some ten or twelve miles long, and lies in the direction of E.-W. The principal mountain, called Serra de Tajurí, is about 350 metres high and is situated on the south-east side of the slope; from Tajurí, a curved line of low ridges extends to the second serra in size, that of Ereré [Ererê], which is on the southern side, and has an elevation of 250 metres; then come the smaller serras of Aroxí, Maxirá, Paraizo, Julião and Urucury, the last being placed at the western end of the ellipse; between this and Tajurí, there is a considerable number of low serras, without names, which have never been explored. All of these serras present an abrup slope towards the central plain, and a gentle slope, following the inclination of the strata, on the opposite side. This inclination, which varies from 10° to 20°, is N. N. E. in Tajurí, E. in the ridges between Tajurí and Ereré, S. in this last, and W. in Urucury. This variation in dip proves thsat this group of mountains is only the remnant of a great anticlinal, of which the central, and by far the longer part has been denuded away. This opinion, respecting the structure of the region, is supported by the structure of the low Serra de Paitúna, which is situated outside of the ellipse, some three or four miles to the south of the Serra de Ereré, with which it is parallel. As was to be expected from its position in relation to the other mountains, Paitúna was found to be a synclinal ridge. It is possible that to the northward of Tajurí there are other synclinal ridges, similar to Paitúna". See also Hartt, 1874a.

⁶² See Hartt, 1875, 1952.

the whale being/ tired, the auta [sic; anta] pulled and nearly/ dragged the whale out of the water,/ and so they pulled, first one and then/ the other, until they were well tired/ out, when the jabutim went down to/ the water and said: "Oh baleia! will/ you admit that I am very strong?"/ "Yes," said the whale, you are very/ strong, untie me." Then the jabutim/ went into the forest and found the/ auta [sic; anta] and said "Oh auta [sic'anta]! will you ad-/mit that I am stronger than you are?"/ And the auta [sic; anta] said "yes you are very/ strong, untie me." And so the jabutim/ got the name among the beasts of/ being very strong./

"How the Jabutim got his Reputation for/ Swiftness of Foot."

The jabutim once met a deer and/ said to him"Oh Veado! I am as/ swift as you are;" but the deer made/ sport of his short legs and said, "you/ cannot run;" but the jabutim said/ "let me run in the forest while you/ run in the campo and I will beat you?"/ The deer said: "no one can run in/ the forest;" but the jabutim said, "I/ can run faster in in [sic] the forest than on/ the campo because I am accustomed/ to running there."/

So they appointed the day for the/ race, and the jabutim went and col-/lected all his friends and relations,/ the macacos, the tatons [sic; tatus], the antas,/ &c., and placed them all along the/ edge of the forest, saying to each,/ "when the deer comes along and/ calls, if he is behind you answer, but/ if he is before you say nothing." So/ at the appointed time the jabutim took/ his place in the edge of the woods,/ and the deer on the plain and the/ race began. The jabutim did not/ move but the deer walked leisurly [sic]/ along, and after going a short distance/ stopped and putting his head over his/ shoulder and looking back he said:/ "O jabutin [sic]!" But a voice in front of/ him answered: "O veado." The/ deer pricked up his ears at this and/ trotted on quiet quickly for a distance/ and then stopped again and looked/ back and cried "O Jabutim!" when/ he heard a voice answer away beyond/ him, "O Veado!" The he began to/ run, crying "O Jabutim," as he ran;/ but there was always a vioice ahead of him that answered "O Veado;"/ and so he ran and ran until he dropped/ down dead, and so the jabutim won/ race [sic] and got the reputatiuon among/ the beasts of being very swift./

The Indians seemed to be very/ much pleased with these stories and/ showed us how the auta [sic; anta], in the trial/ of strength stuck his toes into the/ ground and held on to keep from be-/ing pulled into the water, and, in the/ race between the deer and the

jab-/utim, with what a scornful air the/ deer first looked over his shoulder/ and cried "O Jabutim," and how/ startled he looked, when he heard/ the answer far ahead of him./

We were hardly done with these/ stories when night came, and with it/ or enemies the musquitoes [sic] in count-/less buzzing, hungry multitudes. We/ then wrapped up and lay down, but/ the musquitoes [sic] would crawl under/ the edges of our blankets and bite/ and if one of us put his nose out for/ a breath of air that immediately be-/come a great point of attraction./ After enduring this for a short time/ we threw the blankets to one side and/ began running and jumping and sing-/ing about the fires, much to the amuse-/ment of our Indians who seemed to/ take the bites as a matter of little/ importance. We finally set fire to/ the palha shed that we did not oc-/cupy and the dry roof made a great/ light that made the forest and moun-/tain side visible for a while and then/ it faded in ashes and smoke. Toward/ morning it grew cooler so that we/ could bear our blankets and tired out/ we lay down and slept until day light/ when after a hurried breakfast we/ set out up the mountain. Tajury [Itauajuri]/ seeming to have been utterly unex-/plored until our visit no one knowing/ any thing about it except a few In-/dians who had visited one edge of it/ only, after Cowati⁶³ [sic; cumatê or cumati] - the bark of a/ tree which is used to set the colors/ with which they paint their cuias⁶⁴./

Various stories were told us of a/ large lake upon the top of the moun-/tain with a porpoise in it, crevices of/ the rocks filled with monkeys and/ ounces, &c., and we were prepared/ to see almost any wonder./

We cut our way along the little/ stream for a while, and then directly/ up the mountain side, though the/ woods were so thick we could not see/ where we were going. After a cou-/ple of hours work we came out at the/ lower edgee of a great elevated plain,/ which forms the top of the mountain,/ and extended on and upward for per-/haps two miles farther before the/ highest point was reached. We/ were now perhaps eight or nine hun-/dred feet above the low ground about/ the mountain and the highest point was still four or five hundred feet/ above us, but di-

⁶³ Cuwati – Cumatê or cumati – the black varnish used to paint the bowls, may be extracted from several plants: (i) achuá, cumatê or uachuá, Saccoglotis guyanensis, Humiriaceae (Corrêa, 1984(I): 26); (ii) Myrcia atramentifera, Mirtaceae (Corrêa, 1984(II): 478); (iii) pariri. Arrabidea chica, Bignoniaceae; (iv) Swartzia polyphylla (Leguminosae – Cesalpinoídeas) – also called "pitaíca" or "pitaíca-da-terra-firme" (Corrêa, 1984(V): 508).

⁶⁴ Cuias (Bowls) – For the techinques of bowl preparation, see the paper of A. M. de S. Santos (1982: 29-33).

rectly across our/ path ran a number of deep ravines/ or cannons with perpendicular rocky/ sides. The plain was in many places/ completly [sic] bare showing nothing but/ solid rock, but in others there was a/ little soil with grass and a few stunted/ trees. Our men soon cut their bare/ feet on the rocks so that they could/ go no further, but we pushed on/ across one ravine after another and/ all the time upward, until we reached/ the highest point where we had a/ most magnificent view of the sur-/rounding country. On the west to-/ward Ererê, the mountain was very/ steep and covered with timber but on/ the other side toward the northeast/ the barren rocky plain extended with/ a dip of perhaps twelve or fifteen de-/grees to a distance of two or three/ miles. The mountain is composed/ of argillaceous sand stone and seems/ to be a relic of some ancient age that/ has been tilted up here out of the/ way while the rest has been perhaps/ long ago carried into the Atlantic./ We found no fossils from which to/ judge of the age of the mountain, and/ after the Professor had taken some/ observations with the barometer to/ find its real height, we started back/ and gathering up our men made our/ way down the mountain; not as be-/fore, but along the rocky bed of a/ stream, dry at this season./

After following this half way down,/ we found a nice spring bursting out/ of a crevice of the rocks, and after a/ good drink all round we went down to/ where we camped the night before,/ but only stopped for coffee, and then/ walked back to Sandoso [?], and early/ the next morning we walked into/ Mont [sic; Monte] Alegre, having been gone but/ forty-eight hours on the trip. We/ took passage on the fourth of the/ month on the steamer Arary, and the/ next morning found ourselves here/ again.

J. B. STEERE

Letter XXVIII [wrongly numbered; should constitute letters XXVI and XXVII]

[Peninsular Courier and Family Visitant, 10(51),
December 22, 1871]

FOREIGN CORRESPONDENCE

Number XXVIII

SANTAREM, BRAZIL, September 10, 1871.

After our return to Santarem we/ made a visit to the American settle-/ments of Panema and Diamantina,/ which are upon the mountain or table/ land back of the town and six or seven/ miles distant.

There are at present/ four families of Americans at each of/ those places, with three or four more/ scattered above, so that there are/ about a dozen families in the vicinity/ of Santarem [Santarém], of towards two hundred/ persons that came out as colonists/ with Major Hastings and a large pri-/vate emigration besides. Of those/ remaining but four families are/ of the original colony. This colony/that Major Hastings brought here was/ organized in Mobile and was inten-/ded, according to his prospectus to/ be made up of those high spirited/ southern men who could not submit/ to defeat and its consequences, but/ who were willing to leave home and/ seek fortunes in another land; with/ this there was perhaps a hope of trans-/planting our language and customs/ to Brazil, and of here regaining the/ political power they had lost in the/ States. For some reason or other the/ men of the quality wished were want-/ing and for lack of better material the number seemed to have been/ made up to a great extent of those/ whom our country could well spare./ They took passage at Mobile in the/ "Red Gauntlet," a blockade runner/ which was seized for debt upon their/ arrival at St. Thomas and the col-/onist [sic] completed their voyage to Parà/ in the regular American and Brazil-/ian mail steamer. They arrived in/ Pará on the seventh of September/ 1867, and after a stay of several/ weeks were furnished with transpor-/tation to Santarem. The Brazilian/ government had paid their passage/from the States and was now to fur-/nish them with provisions for six/ months, by which time they were ex-/pected to have raised their own; but/ this all remained a debt against the/ colonists to be paid when they be-/came able./

Major Hastings had also procured/ of the government upon the same/ terms of future payment a large tract/ of land upon the mountain, of which,/ with true American ideas of land/ each claimed a mile square; land/ enough to have served the whole col-/ony. A large palha hut or barrack/ was now built near the mountains, in/ which they had chosen their tracts and/ built houses of their own, and a/ credit was oponed with a certain mer-/cantile house in Santarem, sufficient/ to buy fish and familia [sic; farinha], the meat and/ bread of this country, for six months./

Complaints were soon made of the/ quality of this, which would have/ been poor enough at best for those/ accustomed to American living and/ some expended their credit in sar-/dines and wheat flour, the latter of/ which sells here at from twelve to six-/teen dollars, and they were soon beg-/ging of government for something/ more to eat. Others tried to cook/ the familia [sic; farinha] and to make something fit/ to eat of it in their way, but all such/ experiments turned

out failures their [sic; there]/ being enough acid always present in the farinha to give such dishes a most/ disagreeable [sic] taste. Many now dis-/paired of doing any thing here and/ hung about the streets drunk, and/ ragged, and dirty - both women and/ men- for rum was the only thing/ cheap in the whole place and upon/ two or three cents they could get/ most gloriously drunk and forget/ their troubles. About this time/ Major Hastings died and then gov-/ernment refused to recognize the con-/tract existing with the colony, not/ even paying the surveyor employed/ by Major Hasting to survey the lands/ not recognizing the surveys made by/ him, so that the colonists were left/ without legal boundaries to their/ lands, and with no chance to pay for/ them except such as the Brazilians in/ in [sic] general have, and the Americans/ now here have no titles to the soils/ they occupy and no way of getting/ it except by employing a government/ surveyor from Parà [Belém], at great expense/ to resurvey them and then paying/ the regular price fixed by the Brazil-/ian government. The laws of Brazil/ are very strict in regard to debt, the/ one in debt becoming almost literally/ the slave oh his creditor, being oblig-/ed to work for him when called upon,/ and not being allowed to leave until/ he has permission, or has paid his/ debts./

The colonists were now debtors to/ the government, but many of them/ long before this had stolen their way/ down the river to Parà, and from/ there had begged or worked their/ passage to the States. At last the/ government seems to have lost all hope of succeeding with the colony/ and it finally gave many free pass-/ages on the steamboats down the/ river to get rid of them. In this way/ all got away, except a few families/ who were too poor to go back decent-/ly, and too proud to do so in any/ other way, and of these the Ameri-/cans now here are made up./

We first went to Pauema [sic; Panema], the origi-/nal seat of the colony, and stopped at/ the house of Judge Mendenhall, an/ Alabamian. The Americans have/ failed to find water upon the moun-train after digging to a depth of a/ hundred feet but the best farming/ lands are always upon the table lands/ at the top, so that they have all set-/tled at the foot of the mountains near/ springs and small streams, with their/ fields four or five hundred feet above/ and steep roads and paths leading up/ to them, and, where sugar cane is ex-/tensively raised, - "shoots" of boards/ down which the cane slides to the/ bottom. The Judge's palha house/ had a floor of puncheons and the rail/ pens with the pigs, and the great/ flock of chickens about the door,/ made one think of frontier life at the/ west, though the palm leaf houses/ with doors of the same

material and/ without windows, seemed rather slight/ in comparison with the solid struct-/ures of logs that one generally sees/ in like circumstances at home. The/ buildings stand yet among the native/ trees among which I noticed several/ covered with beautiful scaret [sic; scarlet] and/ lilac colored flowers. Just below the/ house stood a great tree of cumaru⁶⁵/ or tonka-bean, that was just shedding/ its fruit, which is an almond like nut,/ covering the bean of commerce, but/ having on the outside of the shell a/ thin coating of aromatic fruit which/ is much sought after by birds and monkeys, and even the anta is said to be found of it./

We arrived about supper time, and were pleased to see plenty of corn/ bread, squashes, beans, etc., on the/ table; there being also a little fish/ and fanirha [sic; farinha] to remind us perhaps of/ what we had been using, though/ there was no need of this to give us/ good appetites./

The Judge and his family were/ very busy with their tobacco, which/ they cure and prepare for market ac-/cording to the Brazilian method,/ pressing it out into long rolls and/ then winding it closely with the stem/ of a small climbing palm. The next/ morning we went up the mountain/ along a nice road that was supported/ on the lower side by logs and brush/ and dug out of the side of the moun-/tain on the other. On the mountain/ we found a field of eight or nine/ acres, a part of it in fine sugar cane,/ an acre or so in tobacco. And corn,/ and beans, and squashes lying all/ around. In one part there was a/ quantity of American cotton of good/ quality but almost useless without/ gins. The Brazilians generally use a/ coarse kind of cotton in which the/ seeds all cling together in a mass, so/ that the cotton can be easily picked/ from them by hand, and one will al-/most always see around the cabins of/ the Indians several plants or trees of/ this - for it often grows ten or twelve/ feet in height, which lives many years/ and give cotton, a few bolls at a/ time, nearly all the year round. One/ of the most common and characteris-/tic sounds one hears when passing/ their cabins is the clatter the women/ make in beating their cotton into/ rolls or bats for spinning. The spin-/ning is done upon rude wheels that/ turn with the foot. The cord is then/ doubled and twisted by passing it/ over a hook in a rafter overhead and/ twirling a heavy spindle in the hands/ winding on the twine as it becomes/ sufficiently twisted. The twine or/ cord thus made is used for hammocks/ for which a coarse strong cloth is re-/quired, the loom being merley [sic] a/ square frame with the warp fastened/ above and below, a flat sharp edged/ stick being used

⁶⁵ Cumaru – Dipteryx odorata (Fabaceae).

to drive the filling/ to its place. Many hammocks are/ made in this rude slow way, but I/ have not seen the native cloth used/ for any other purpose./

8After seeing all the Americans at/ Panema we concluded to cut our way/ across the mountain, to Diamantina,/ where the rest of them live. The/ distance is calculated to be six or/ seven miles but we certainly traveled/ two or three times that diatance start-/ing at seven o'clock in the morning/ and travelling steadily until five in the/ afternoon: one of us walking in front/ with a great knife and cutting the/ vines and bushes that were in our/ way. Long before we got through/ we were glad to find some of the/ water vine, a reddish vine that is well/ known to all Indians and hunters./ It contains quite an amount of pure/ cool water and is quickly cut into/ lengths and tipped up, with the ends/ in a cup, one can soon get water/ enough to quench thirst66. We came/ out finally at the house of Mrs. White/ a widow woman who lost her husband/ in this country, she still lives two or/ three miles from neighbors, except/ the Tapuios or Indians, who, she said/ treated her with great kindness, near-/ly always bringing her a piece of fish/ when they killed one, and after send-/ing her little delicacies, a few hands-/full of fresh farinha while they were/ making it, or a few 'berjus' [sic, bejus], little/ farinha cakes. She seemed glad/ enough to see somebody that could/ speak English, and hanging ham-/mocks for us to rest in, she made us/ a cup of coffee; while she was doing/ this, her daughter, a great strapping/ girl, who seemed to thrive under the/ Brazilian sun, came in bare footed/ from the field when [sic; where] she had been at/ work with the Indians. They all/ seemed cheerful and professed to en-/joy life here, but the litte boy, who/ went with us to show the way to the/ next neighbor, informed us the first/ thing that he did not wish to go back/ to the States, showing that this was/ a question that was often debated in/ the poor widow's household, and I/ hope she may soon make tobacco/ enough to pay her way back, when [sic]/ her children can go to school/ and learn something of civilized life./

Unlike the other Americans, Captain Riker and Mr. Vaughn have/ settled in sight of one another, so/ that they can use the same road up/ the mountain side, and in many other/ ways conduce to each others comfort/ and profit. Captain Riker has already/ a great deal of machinery at work/ much of which he has made with his/ own hands. With what help he has/ been able to get from the Tapuias, he/ has now

about thirty acres of im-/provement nearly all in sugar cane/ and he will make this year fifty or/ sixty pipes of cachaca [sic; cachaça], worth sixty-/five or seventy dollars the pipe. He/ now presses the cane by horse power/ but he intends finally to dam a pretty/ stream that runs through his place/ which will probably furnish all the/ power necessary./

He has just built a new shoot —/ which is perhaps five or six hundred/ feet long and the stalks of cane come/ out below with such force as to fly/ forty or fifty feet from its mouth, often/ breaking to pieces as they strike. The Captain took pains to show us/ his cane field, and to enlighten us in/ regard to cane raising in this country./

His cane was a regular swamp,/ that could hardly be passed through/ by man or beast, the canes lying/ coiled and twisted on the ground in/ every direction, often being ten or/ twelve feet in length. Cane grows/ almost spontaneously, the only need/ being to once get the ground well/ cleared and planted, when the cane/ will go on growing and yielding crops/ for eight or ten years with no labor/ except harvesting; the cane so com-/pletely covering and shading the/ ground that nothing else can grow,/ and when the cane is cut the leaves/ cover the ground for several inches/ in depth and keep it well enriched/ and clean until the young cane/ can take care of itself./

Cutting and grinding instead of/ being crowded into a month as it is in/ the cane raising system at home, can/ be done during the whole year though/ the dry season is the most favorable./ The juice or garape [sic; garapa] is allowed/ to stand in large vats until al-/coholic fermentation has taken place/ when it is distilled, making a clear/ water colored spirit of about twenty/ degrees Baume, which is well known/ here as *cachaca* [sic; cachaça]./

Mr. Vaughn has sixteen or eighteen/ acres under cultivation here, which/ will produce toward thirty pipes of/ cachaca [sic; cachaça], but a part of his family are/ raising cane elsewhere./

The soil all along the mountain as/ far as I have been is a rich yellow/ clay loam, but remarkably loose and/ easy to work, looking as if it was all/ in little pellets, such as ants carry out/ upon top of the ground from their/ underground nests. Along the im-/mediate edge of the mountain, a/ great share of the land is that which/ is called *terra preta*⁶⁷, or black lands./ It is from one to three feet in depth/ and filled with pieces of crockery,/ stone axes, heads of idols, etc., etc.,/ showing long occupation at at [sic] sometime./

⁶⁶ The cipó-d'água, cipó-vermelho or muiraqueteca, Tetracera willdenowiana (Dilleniaceae) (Corrêa, 1984(II): 274).

⁶⁷ About terra preta or black earth, see Lehmann, Kern, Glaser and Woods, 2003.

The timber along the mountain is/ generally not more than a foot in di-/ameter, though quite straight and/ tall, as if it was of recent growth, but here and there are great gnarled/ *Piquias*⁶⁸ [piquiá] and *Castanhas* and *Jutais*/ which look as if they belonged to an-/other generation. They may have/ been planted or at least protected by/ the ancient possessors for the fruit/ they bear./

We found some very beautiful ferns/ along the rocky streams and about/ the springs that break out along the/ mountain, and at Diamantina I saw/ for the first ime a tree fern, with a/ stem six or eight feet in length, a most beautiful tree. After pack-/ing up our collections of plants bits/ of crockery, etc., and making ar-/rangements with some of the/ people to bring them to town we/ walked back, having become pretty/ thoroughly acquainted with the re-/sults of American emigration to this/ part of Brazil./

There are certainly many things/ that are favorable to the success of/ Americans who settle here. The soil/ is very rich and its producting powers/ are increased by the moist climate./ There is no winter to prepare for, no/ need of cutting or curing hay or/ building warm stables for stock, so/ that the farmer can always be produ-/cing. Prices are high for nearly/ every thing that can be raised, and/ sugar being twelve and fourteen cents/ per pound, corn a dollar and a half a/ bushel, tobacco a dollar per pound,/ etc. etc./

Among the objections to Amer-/ican emigation is the food that the/ country furnishes which at best is/ poorer than that of ordinary labors/ at home./

The settlers have no cows, the nat-/ive cattle being worthless for milk,/ and those imported likely worth just/ as liitle until they become limited,/ so that milk and butter are things/ almost fogotten by them, though/ they sometimes make a substitute for/ the latter from the oily fruit of the/ Piquia [piquiá] and other tree. Potatoes/ can not be raised here and those im-/ported from Portugal are poor and/ cost from eight to ten cents per pound./ Sweet potatoes grow as weeds and/ can hardly be got rid of, but the po-/tatoes themselves are generally poor,/ for what reason is more than I can/ tell. Wheat flour must be imported/ from the States and costs too much/ to be in common use, but the Ameri-/cans all have small steel mills that/ turn by hand, a many of them use/ very little farinha, living almost en-/tirely on corn or rice cakes. Hogs/ are easily raised, but the settlers as/ yet have no fences about their crops,/ and can not raise as many as they/ other wise would. Cattle would/ hardly thrive in the thick woods, but/ are easily raised where there is

campo/ and where settlers have enough/ ground under cultivation to spare/ some for pasture, they can raise beef/ with little trouble./

The climate is not near so bad as/ it is thought to be by the people in the/ United States. There is a breeze/ blowing almost continually from the/ east, and the nights are generally/ comfortably cool. I do not think the/ weather even gets as oppressive as/ it does at home, sometimes during/ the latter part of July. The Ameri-/cans are able to work moderately all/ day in the sun, but, after all, perhaps/ from lack of the invigorating effect/ of our winters, or from lack of the/ accustomed food, they want the ro-/bust look of Americans at home, and/ their children, especially, look poor/ and puny./

The question of procuring labor, is/ a much more perplexing one here than/ it is in the United States. Slaves are/ running down in value, and usefulness, as the question of liberating/ them is consistently before the country/ and every one understands that the/ system cannot exist much longer./ The Tapuios or native Indians having/ little more ambition than our own/ Indians in the United States. Of/ their own free will they will do little/ but fish and hunt and make a little/ farinha, but since their acquaintance/ with the whites they have acquired/ some tastes that cost many of them/ dear. They delight in finery and to/ dress themselves in a becoming man-/ner for a church feast or a baptism,/ they will go to some fazendiero [sic; fazendeiro] or/ shop-keeper and borrow a few mill-/reis [sic; mil réis] promising themselves to pay it/ at the next fishing season, or to make/ a few pounds of rubber, but the craf-/ty white into whose hands they have/ fallen, is in no hurry for his pay, and/ is perfectly willing to lend them more./ The Indians keep no account and be-/fore they know it they are forty and/ eighty dollars in debt, an immense/ sum in their eyes, and so they be-/come serfs to their creditor, working/ for him when called upon, losing the/ rights to leave the neighborhood un-/less with his permission. Their pat-/ron gives them a few days now and/ then to plant their mandioca patches,/ and he sells them a little coarse/ cloth and they and their/ children go on working for him/ as if they were literally slaves. They/ may in some cases pay up their debts/ and become free, but such cases must/ be rare. I do not know to what ex-/tent this system is recognized by the/ law of the land; but it is certainly/ upheld by the officers of the/ government, who in all cases send/ such men to their patrons, when they/ attempt to get away, and some of the/ Brazilians with whom I have spoken/ on the subject say that it is necessary/ to force these men to labor, and they/ wish even severer laws in this

respect./ I do not know what share of the/ Tapuios have fallen under this system/ but should think that it included the/ large part of those christianized./ These debts against the Indians are/ bought and sold, and the right of/ patronage is sold with them. Several/ of the Americans have bought up/ some of these debts and have procur-/ed help in this way./

The lack of society, schools and/ churches, is in fact the greatest objection of all, the settlers being too/ few and too much scattered to sup-/port them themselves. Quite a share/ of the Americans feeling as if they/ were out-casts being looked upon with/ suspician [sic] by the Brazilians, have joined the Catholic church, to put/ themselves on a better footing, and a/ few of the young men have married/ with the Brazilians. These may re-/main and really become Brazilians,/ taking up with their language, reli-/gion, morals, and all; but for those/ who cling to their Protestant faith/ and the civilization of this nineteenth/ century, there is no hope but to go/ back home unless a large number of/ emigrants from the states [sic] could be/ induced in some way to come, and/ this is not likely now, while there is/ plenty of good land at the West to/ be had for the making, where there is/ sure to be good society, schools, and/ everything else that we are accus-/tomed to consider among the necesi-/ties [sic] of life, within a very few years/ after the settler has scared away the/ wolves with the first blow of his/ axe. Those now here, say that there/ is little hope of emigration from the Southern States at present; though/ they think that if the matter had fall-/en into the right hands at first before/ the Southern people had made up/ their minds to accept the situation/ there would have been a very dif-/ferent result. They are nearly all/talking of sending their children/ back or of going back themselves,/ and five years will not likely find/ many of them here./

J. B. STEERE

Letter XXVI [wrongly numbered; should have been letter XXVIII]

[Peninsular Courier and Family Visitant, 10(48),
December 1, 1871]

FOREIGN CORRESPONDENCE

Number XXVI

MANAOS [Manaus], BRAZIL, September 27, 1871.

On the night of the seventeenth of/ this month, I took passage with Pro-/fessor Hartt, and Mr. Derby

his as-/sistant, on the little steamer that went/ up the river Tapajos [Tapajós], and when morn-/ing broke we were thirty or forty miles/ up the river and opposite a mountain/ called – Altar do Chào [sic; Alter do Cháo⁶⁹] – which rises/ much higher than the other hills/ about it and makes a land-mark that/ can be seen at a great distance. The/ river is here six or seven miles wide/ and its water is of a most beautiful/ sea green color with pretty beaches/ of white sand that reach back to the/ timber./

The Tapajos [Tapajós] seems to be dammed/ up at its mouth by the Amazon and/ it acts back like a great lake with an/ average width of perhaps five miles/ nearly to Itaituba two hundred miles/ above. On the south side there is/ generally a perpendicular bluff of/ sandstone from twenrty to eighty feet/ in height which is often of a beautiful/ pink color, but on the north side the/ shores are usually low with sand/ beaches. We saw few of the *palha* huts of the fishermen, which are so/ common along the Amazon and the/ reason is said to be that there are few/ if any of the fish called *pararucu* [sic; pirarucu] the/ staple of this country in the Ta-/pajos, that fish likely being especially/ fitted for muddy streams like the/ Amazon./

We stopped first on one one [sic] side/ and then on the other at little vil-/lages when the mate would take a/ boat and crew and go on shore with/ the three or four letters that made up/ the mail, then perhaps one or two/ Portuguese traders would come on/ board and receive their freight, a few/ gallons of cachaca [sic; cachaça] and a box or two/ of crackers, and getting into their/ canoes their Indians would paddle/ him ashore, while we steamed away/ to go through the same performance/ at another places. Now and then at/ one of these villages a wood scow/ would haul alongside and the crew of the/ the steamer forming a line to the/ batchway the men in the boat would/ begin handing out the wood a stick/ at the time while the first man of the/ line - the burly old Portuguese boat-/swain - would begin counting in a/ voice loud and deep enough to be/ heard half a mile - primeirodois-tres-|quarto - and so on until he had/ reached fifty, when he would throw a/ stick to one side as a tally and go/ over his counting again./

After a pleasant trip of two days/ we arrived at Itaituba, a little town/ of perhaps three or four hundred in-/habitants but of some importance as/ the

⁶⁹ Altar [sic] do Cháo – Alter do Cháo, named after the homonymous town in Portugal (Alentejo). Almost all authors travelling in the area made the mistake of calling it "altar"; the name "Alter" comes from the Latin Abelterium or Eleteri, the original name the Romans gave to the village in Portugal in 204AD.

headquarters of a trade with/ Cuiaba [Cuiabá] which is carried up the river/ by canoes and by portages. Itaituba/ is near the first falls of the river/ which has been spread out below like/ a lake but narrows down here into/ proper dimensions./

Professor Hartt found here last/ year a bed of Carboniferous fossils/ and as we stepped on shore we picked/ up several pieces of limestone, with/ fossils showing in them. The beach/ was covered with worn fossils, quartz,/ crystals, and curiously colored peb-/bles./

I now bid good-by to the Professor/ and Mr. Derby with whom I had/ passed a month very pleasantly and/ was soon making my way back to/ Santarim [sic; Santarém] to again turn my face to-/ward the Pacific. As we went down/ we took in a little freight here and/ there, funny little bundles of India/ Rubber made by piercing the cakes/ and running tough vines through/ them./

They were just as they had come/ from the rubber camps, and each/ bundle of twelve or fifteen cakes re-/presented so many days work of some/ poor lonely fellow, who had worked/ his tread mill round through the/ woods for two weeks or more until he/ had made his load, and had carried it/ down to the village to the hut of his/ patron and then after having a little/ spree on a few cents worth of *cach-laca* [sic; cachaça] and getting his supply of fish and/ *farinha* he had again taken to the/ woods./

The cakes in each mans [sic] bundle/ had a certain family likeness and I/ imagine I could read something of a/ man's character from the rubber he/ had made./

At Carrituba [sic; Itaituba] we took on board/ about fifty bundles of Sarsaparilla⁷⁰,/ which is put up for market in great/ cylindrical rolls a foot in diameter/ and four feet in length closely wrap-/ped with vines. It was likely des-/tined to soon reach the laboratory of/ Ayers or Townsend or Bristol./

I arrived in Santarem just in time/ to get my baggage on board the/ "Belem", bound for this city. When/ we arrived at Obidos [Óbidos] I went on shore/ to see my old friends Dr. DeMattas [sic]/ and wife and found that they had/ remembered me and had been collect-/ing things that they thought would/ be valuable for the museum of my/ University./

After we left the high lands of/ Obidos [Óbidos] we made our way through a/ low country which all appeared to be/ flowed at high water until we reached/

the mouth of the Japumda [sic; Nhamundá]. Opposite/ there on the south side are the high/ lands that are called Paruetins [sic; Serra de Parintins] which form the boundary between the prov-/inces of Pará and Amazonas./

At Lupa [sic; Faro] we came up with the/ second American Bolivian Expedi-/tion which had jost lost the captain/ and engineer below with river fever./

I here saw Mr. Stone an American,/ who has lived here for many years./ He invites me to make his house my/ home when I go back there to exam-/ine some strange inscriptions upon/ some rocks there, which are now/ covered by the river. We arrived/ here last night, but the officers did/ not come on board and give us per-/mission to land until this morning./

J. B. STEERE

Letter XXIX [Peninsular Courier and Family Visitant, 11(6), February 9, 1872]

FOREIGN CORRESPONDENCE

Number XXVIX [sic]

ITUCHY [mouth of the Ituxi River], BRAZIL, October 27, 1871.

On the eleventh of this month we/ steamed out of Manaos and down to/ the mouth of the Rio Negro, or as it/ is generally called here, the mouth of/ the Solymoens [sic; Solimões], the Rio Negro being/ considered the main stream and the/ Amazon taking the name of the Soly-/moens [sic; Solimões] above its junction with it./ Here we waited all night and the next/ day for a pilot who was expected by/ another boat, the contract with the/ government compelling the steam-/boat companies to start a boat on the/ trip upon the allotted day, though/ they may keep the passengers waiting/ a week in the boiling sun just out of/ sight of the city. We passed the/ day as best we could watching for the/ steamer that would relieve us, and fishing over the side of the vessel./ Just at night an immense alligator/ came floating about the steamer to/ examine us, and lowering one of the/ boats and gathering all the guns and/ revolvers on board, we had an excit-/ ing chase after him, and succeeded in/ putting several bullets threough his/ scaly hide, but he escaped us in the/ darkness. After night the other/ steamer came up, and taking our pilot/ morning found us slowly pushing up/ against the current of the Amazon. It had already fallen fifteen or twenty/ feet,

⁷⁰ Salsaparrilha – Name applied to several species of lianas of the genus *Smilax* (Liliaceae), from which roots was extracted a drug considered an efficient depurative.

leaving bare gray clay banks in/ sight. In many places the banks thus/ exposed, being softened and weak-/ ened by its long soaking had slid into/ the river carrying with it a great/ piece of the woodland behind. The/ only sign of life was here and there a/ loon or a king fisher perched upon the/ snags that now begin to show along/ the banks, or the eyes and the tip of/ the nose of an alligator as he lay near/ the shore, patiently waiting for what/ fortune should send to his jaws. A/ Portuguese by the name of Fouseca [sic; Fonseca],/ who was going to the Purus, with his wife and ten or twelve servants to/ make India Rubber, kept up a con-/tinual fire all day upon the alligators/ with an Americam repeating rifle but/ without much damage to them. Just/ at night we stopped at Manacapuru,/ a little wooding place upon the Ama-/zon, and the mosquitoes invading the/ vessel we could not sleep until about/ midnight, when we started again./ The next morning Senhor Fouseca [sic; Fonseca],/ who spoke a little English, came to/ me and told me that his little son was/ lost and that he was afraid that he/ had fallen overboard. He slept in the/ same hammock with a servant, a stu-/pid looking Indian girl, in a little/ open cabin at the stern of the vessel./ According to the statement of the girl, he had crawled out of the ham-/mock just at daylight and she had/ gone to sleep again. There was no/ railing about the place and the little/ fellow had probably walked over the/ side and fallen naked into the Ama-/zon and no one had heard him though/ his mother's hammock hung just be-/side him. The mother cried a little/ for a day or two but before the end/ of the voyage, seemed to have for-/gotten the occurrence and even in-/dulged in a slight flirtation with the/ captain. The father scolded the ser-/vant for her carelessness, but took a/ game of cards to console himself./

The passengers were still more/ careless; one or two only joining the/ father in searching the vessel. The/ rest never moved from their seats,/ but after blaming the father for his/ want of care for a few minutes, went/ on joking and laughing and discuss-/ing the price and prospects of rubber,/ farinha, etc., as if nothing had hap-/pened, though the day before they/ had been petting the little fellow and/ swinging him in their hammocks./

The Indian girl put on a stolid in-/different countenance, but I thought/ that I could detect a look of satisfac-/tion as if she was well rid of a bur-/den. I never dreamed of such want/ of feeling in people who call them-/selves civilized and can only account/ for it from the loose family ties exist-/ing here./

We now ran out of wood and spent/ the next four days in crawling one/ days [sic] steam up to the

mouth of Purus/ tying the steamer up to the bank dur-/ [sic] the day while the crew went on shore/ and cut wood, at night getting up/ steam and running a few miles until/ the wood was gone and then tying up/ again. The passengers spent their/ time in sleeping, playing cards, etc., and I took advantage of the time to/ collect a few birds, shells, etc., along/ the beach. We had a cast net on/ board and the captain often sent a/ boats [sic] crew to fish, for the advantage/ of the cabin table which was already/ nearly reduced to the staples of the/ country, fish and farinha./ By going with them I procured several curious and rare fish./

In the woods I found cacao of the/ same species that is cultivated on the/ lower Amazon, growing wild and ap-/parently to have fruited plentifully, and/ I afterwards saw it in larger quanti-/ties not growing upon ranges of/ mountains as some old geographer/ has fancifully represented, but in the/ valley land or varzea, which is reach-/ed by the flood. Upon one of these/ dull days a lucky shot from Senhor/ Fouseca's [sic; Fonseca] rifle killed one of the alli-/gators and we towed him to the/vessel and hoisted him on deck. He/ was an ugly looking fellow over/ eleven feet in length and with jaws/ that would engulf a man with little dif-/ficulty. A bullet through the brain/ had rendered him powerless to do/ concerted mischief but he floundered/ about the deck in a way that put the/ timorous to flight. The captain find-/ing that I wished the skin suddenly/ became enthusiastic in the cause of/ science and ordered the men to take off the skin to send it to Parà [Belém]. The/ cooks and the deck hands went to/ work with their great knives and soon/ had him half flayed in spite of a few/ lively squirms and were preparing to/ attack his tail, but this seemed to be/ a member in regard to which he was/ especially sensitive for they no sooner/ attempted to cut through its tough/ plates than by two or three blows/ with it, either of which would have/ floored a man if he had been well di-/rected, he cleared the deck. The/ captain now urged on the men again/ and three or four of them clinging to/ her [sic] tail the rest went on with the/ skinning and soon had his hide spread/ on the awning to dry./

The first place we reached in the/ Purus was Berury [Beruri] which is just at/ the mouth and here we found wood/ so that we were no longer obliged to/ cut it. The Purus is here about half/ a mile wide but soon narrows to sixty/ to eighty rods which it holds uniform-/ly for a great distance. The water/ is much cleaner than that of the Ama-/zon but still of a muddy white color./ The time of rise and fall in this river/ is much earlier than in the Amazon, the Purus having reached its lowest/ in September and already

beginning/ to rise while the Amazon is still/ rapidly falling. The Purus is noted/ even in this country of wonders for/ its serpentine course making according/ to my calculations a decided change/ of course in every two miles. At al-/most every bend there is a great/ sand beach or praia as it is called/ here. The banks elsewhere are as/ steep as the loose alluvial clay will/ stand. The trunks of trees uncover-/ed and left standing out of the banks/ in those places where the river is en-/croaching on the land show that this/ valley is of very recent formation./ The Purus above where it was dam-/med by the Amazon was sixty feet/ below high water mark and the asai [sic, açaí] palms, cacao and other trees that/during the winter I had seen with their feet in the water were now far/ above our smoke stacks./

J. B. STEERE

Letter XXX [Peninsular Courier and Family Visitant, 11(7), February 16, 1872]

FOREIGN CORRESPONDENCE

Number XXVIX [sic]

ITUCHY [mouth of the Ituxi River], RIO PURUS, Oct., 27 1871.

From Berury [Beruri] we slowly made our/ way up, winding about among the/ sand banks, stopping now and then at/ some rude barrack to leave the supply/ of farinha, tobacco and cachaca [sic; cachaça] that/ was to support the poor rubber gath-/erer during another month. The/ praias were covered with screaming/ flocks of gulls and other birds that are/ more generally in the ocean, which/ had gathered together for the purpose/ of nesting in the sand. We were also/ always in sight of porpoises, of which/ there appeared to be two kinds in the/ river.71 As they come up to breathe/ they point their heads almost perpen-/dicularly out of the water and then/go down with a rolling motion that/ makes them appear to roll through the/ water like wheels. We often passed/ through schools of young turtles that/ would give a stupid wondering look/ at the vessel and then sink to the bot-/tom. Turtles form the principal food/ of the inhabitants of the Purus and/ we were very soon reduced to the/ same

fare. The oil from these and/ their eggs, with cacao and sarsaparilla/ used to be the products of the Purus,/ but rubber has now driven these from/ the field, or they are left to the slow/ siftless labor of the Indians./

We were now regularly supplied/ with wood, but for two or three/ nights in succession we ran upon the/ sand-bars, and in the morning, while/ the crew were digging the sand from/ about the steamer's prow, we could/ go on shore upon the *praias*, where/ I collected many shells, bird's eggs,/ etc. Among the trees that are found/ along the bank of the Purus, is a/ willow that makes them appear quite/ home like./

The Purus, for the thousand miles/ and more that I followed it, runs/ through a valley of varzia [várzea], or land that is covered with water at the flood./ This is the home of the india rubber/ tree, cacao and balsam copaiva [sic; copaiba]. The/ soil is a grayish clay that appears to/ be of recent formation. Back of the/ river at a distance of one, two or/ three miles, on both sides, are chains/ of shallow lakes, and back of these/ still more on the varzia [várzea]. The bottoms/ of these lakes are much higher than/ low water mark on the river and as the/ river goes down they are drained out/ into it until there is nothing left but/ small ponds, which are crowded with/ fish, turtles and alligators that failed/ to make their escape while the water/ was flowing out. In the few places/ where the terra firma, or land which/ does not overflow, comes to the river/ it is easily known being composed of red sand and clay, covering beds/ of blue clay in strata, and under this/ in some cases a soft blue sandstone/ is found. This terra firma [firme] is generally/ but ten or twelve feet above the var-/zia [várzea], and one looks in vain for hill or/ mountain or something else to break/ the endless monotony of the scene as/ he winds slowly about, day after day, among the praias and the steep banks./

At Itaituba [sic; Itatuba] and Ariman [Arima] low black/ reefs of rocks appear above water in/ the middle of the river. Upon exam-/ining them, I found they were com-/posed of blocks of soft, yellow sand-/stone, covered with a coating of iron/ ore, in which I found many pieces of/ fossil wood, which appears to have/ existed in the sandstones: but to have/ all decayed except the parts protrud-/ing and thus becoming covered with/ the iron ore. I also found that which/ appeared to be points of leaves. The/ passengers were quite incredulous in/ regard to my fossils until I showed/ them some of the wood that was not/ yet petrified, though surrounded by/ the rock. They then considered it/ antediluvian, wood such as Eve used/ to cook turtles and fish with, they/ having a belief in the literal meaning/ of the chapters of the bible

⁷¹ Inia geoffrensis (Blainville, 1817) (Cetacea, Platanistidae) and Sotalia fluviatilis (Gervais & De Ville, 1853) (Cetacea, Delphinidae).

that treat/ of the creation that is quite novel at/ this day./

We had seen signs of recent occu-/pation on the sand praias for several/ days; tent poles, bushes set up for/ shade, turtle shells, etc., and as we/ neared Pirauhas [sic; Piranhas], we saw a village of the tribe called Pamarys [Paumari] encamped/ upon the beach. There were a doz-/en oven shaped huts or wigwams/ made by bending poles and placing/ them in the sand and/ spreading upon them long, narrow/ mats made of palm leaves. They were/very low so that their owners crawled/ into them, and were open at both ends./ Upon the beach were a dozen little/ canoes, real dug outs, in shape much/ like those that are found in the little/ lakes of Northern Michigan where a/ few Indians still linger. A troop of/ dogs welcomed us with their barking,/ and the people came flocking down/ to see the steamer as she passed, while/ a great black monkey galloped across/ the sand after its owner, swinging, in/ a comical manner, its long tail, which/ was made to catch at the limb of/ trees in passing from one to an-/other in the forest. The people were/ quite small, the men averaging but/ about five feet two inches as I found/ afterward by measurement. The hair/ of both women and men hung to their/ shoulders, being cut square across the/ forehead just above the eyes. One/ very modest though curious maiden/ contented herself by taking a peep at/ us from behind her hut, her head just/ appearing above it./

At another stopping place just/ above we found another village of/ them. There was a heavy storm at/ the time of our passing and the wind/ was blowing the light mats, which/ formed the roofs of their cabins, over/ the beach. The women and children/ were in full chase through the rain/ but the men cared but little/ for their flying property, but/ crowding into a narrow canoe they/ paddled after us as fast as they could,/ and arrived at the place nearly as soon/ as we. Their haste seemed to be/ caused by the promise of a drink of/ cachaca [cachaça], for helping load wood upon/ the steamer. I hurried on shore in/ the mud to examine them. They are/ affected with a skin disease which/ was called by some leprosy. There/ are three forms or stages of this, one/ affecting the feet and hands and some-/times other parts of the body and/ covering them with white spots; this is the most conspicuous, but is said to/ be the mildest form of the disease./ Another form leaves the part of the/ skin affected perfectly black, and this/ also often attacks the face and hands,/ and I afterwards saw children af-/fected with a disease which/ may be the first form of this evil./ They were spotted here and there/ with great blotches that turned their/ natural mohogany color

to a sky blue./ These spots were generally oval, and seemed to keep spreading until they/ nearly covered the body. The young-/est were generally free from it, it likely/ appearing first three or four months/ after birth⁷²./ They all have their lips/ and noses pierced with holes in which/ they keep small wooden pins or plugs,/ these often standing out from the face/ and giving it a strange appearance./

Canutama is the nearest a village/ on the Purus river and was settled/ many years ago by Senhor Manoel/ Urbano⁷³, an old mulatto who has been/ trading upon this river for forty [sic] years./ He has gained great influence over/ the Indians, and has had almost a/ monopoly of trade with them, but the/ rubber

- 72 This disease is the pinta, caused by the spirochete Treponema carateum, a relative of the bacterium which causes syphilis. The word "pinta" comes from the Spanish and means "painted". It occurs in rural, poverty-stricken areas of northern South America, Mexico and the Caribbean. Unlike syphilis, it is transmitted by nonsexual skin contact, often between children living in conditions of poor hygiene. The bacteria enter the skin through a small cut, scratch, or other skin damage. Symptoms occur two or four weeks after exposure to the bacteria. The first sign of infection is a red, scaly, slowly enlarging bump on the skin. This is called primary lesion. The primary lesion usually appears at the site where the bacteria enterered the skin, most often on the arms, legs, or face. Smaller lesions then form around the primary lesion. These are called satellite lesions. Lymph nodes located near the infected area may become enlarghed, but are painless. The second stage occurs between one and 12 months after the primary lesion stage. Many flat, scaly, itchy lesions called pintids occur either near the primary lesions or scattered around the body. Pintid lesions progress through a range of color changes, from red to bluish-black. The skin of older lesions will become depigmented (lose normal color). The Paumari, or Pammarys, were then also known as Puru Puru, or "spotted" (Indians), as they suffered from pinta. In 1863, Coutinho (1865), while visiting this tribe, attributed their skin disease to the ingestion of the adipose tissue of fishes, especially the pirarara (Phractocephalus hemioliopterus (Bloch & Schleider, 1801), Siluriformes, Pimelodidae), and turtles, as well as to drinking "caxiri de pirarurucu" (Arapaima gigas (Schinz, 1822), Osteoglossiformes, Arapaimidae), a beverage prepared from the fermentation of that fish; Coutinho commented that the fat of the pirarara, in the same region, had the property of changing the color of feathers of parrots and it could cause the same effect upon the skin of the Paumari [cf. Bonilla, 2005: 43].
- 73 Manoel Urbano da Encarnação (cf. Ferrarini, 1980: 33-45), descendent of Mura Indians, explored the Purus River in 1861 and made a brief report of the trip, written by Major João Martins da Silva Coutinho (one of the companions of Agassiz in his Amazonan journey) [reproduced in Ferrarini, 1981: 31-35]. Encarnação was one of the first settlers in the Purus region, living in Canutama. He explored several rivers in the Amazonian region, buy especially the Purus, which he ascended again in 1863, with Major Coutinho, during the first trip made by a steamer (the *Pinajâ*) up that river [see Coutinho, 1865], and in 1866, accompanying William Chandless. In 1882 he sent a letter to Ferreira Penna, in Belém, about the Indians of the Purus, published in 1900 (Encarnação, 1900).

gathers [sic], who have settled/ about him, have deprived/ of many of his customers, who now/ go where they can trade best. I/ found at Canutama Dr. Burroughs,/ one of the ill-fated expedition to Bo-/livia with Mr. Piper. He stranded/ here on his way down the river and/ expects to stay for several years. He/ was just recovering from a wound re-/ceived while drawing a seine in the/ river from a sting ray./

Most of our passengers left us here/ but Mr. Fouseca [sic; Fonseca], my English speaking/ friend and I came on to this place,/ where we arrived after fifteen days/ travel. We are now about eight hun-/dred miles from Manaos, in a direct/ line, but twelve hundred by the river./

I am stopping at Senhor Urbano⁷⁴,/ to whom I have letters of recommen-/dation. He received me with great/ kindness, but as this is the busy sea-/son in the rubber camps, he cannot/ visit the wild Indians with me, but/ promises to do all in his power to/ make my trip profitable./

J. B. STEERE

Letter XXXI [Peninsular Courier and Family Visitant, 11(8), February 23, 1872]

FOREIGN CORRESPONDENCE

Number XXXI

MARRAHAN [Fortaleza do Ituxi], RIO PURUS, November 10th, 1871.

After several days in Ituchy [mouth of the Ituchi River], spent/ in hunting and fishing, Senhor Urba-/no sent me with his agent Senhor/ Baptista to this place which is the/ highest point upon the river inhabited/ by civilized people, and in the very/ midst of Indians. Our boatmen for/ the five days trip were Pamarys [Paumaris], and/ one of them, Baida was a chief of the/ tribe, and speaks some Portuguese, so/ that I had a good opportunity of/ learning their language, customs etc./ As below, we found the river very/ tortuous with long sand beaches at/ every bend. When we reached one/ of these *praias*, two of the Indians/ would get out and, making a long line/ fast to the boat would draw it along/ as fast as they could walk, while

old/ Baida sat in the boat, and with his/ paddle over the side kept us at the/ right distance from shore, and did his best to enlighten me in regard to/ his people. There is a tradition/ among the tribe that many years ago/ there was a great flood; the river at/ its winter filling did not stop and go/ back when it had reached the varzia [várzea],/ but kept on rising higher, until finally/ it covered the high land and the peo-/ple all took refuge in the trees. They/ found new fruits and were compelled/ to live on leaves, and many grew/ weak and fell into the water and/ were drowned. When the river final-/ly went back into its channel there/ were but a few starving people left,/ and they for fear of a return of the/ flood built themselves great rafts and/ at the approach of winter always took/ their families and possessions and/ went to live upon them. Whatever/ may be the truth of the tradition, the/ Pamarys [Paumaris]75 are a race of water men, liv-/ing during the summer upon the prai-las, their huts standing within a few/ feet of the water and their canoes./ When the rising water drives them/ from the praias they go back to the/ lakes which are always near, and live/ upon their jangadis [sic; jangadas] or rafts until an-/other summer. They are very expert/ fishermen and are said to catch turtles/ by diving to the bottom of the river/ and finding them in the mud. Their/ principal food is fish and turtles, and/ with this such few fruits as they can get without getting far from the river./

Their canoes are long and narrow/ and hewed into shape instead of being/ spread with fire like those of the Tap-/uios, and their paddles are small and/light, but with long pointed blades/ very unlike the round bladed paddles/ used by the Indians of the Amazon./ Their method of rowing their canoes/ seems to be original with them as we/ often meet one of them on our trip,/ drawing in this way his wife and/ children to better fishing grounds./ They live scattered along the river in/little villages, each under the control/ of a hereditary chief, though this/ chief seems to have very little power,/ and I could hear of no principal chief/ to whom they all owe allegiance, I/ could find no name for God in their/ language, though they have men/ among them who seem to divide the/ duties of priests and doctors and they/ gave me a name for the evil

⁷⁴ Steere's "Ituchy" must refer to the mouth of the Ituxi River, an affluent of the Purus, where a son of Manuel Urbano da Encarnação, named Braz, had his residence (Ferrarini, 1981: 55). It is not Lábrea, as Prof. Hubbell thought, as Steere mentions this locality in Letter XXXIV as a different place.

⁷⁵ The *Paumaris*, as well as the *Jamamadis* (or *Yamamadis*) [cited below by Steere] are tribes of the Arawá linguistic family. The *Apuriná* (called Hypurina by Steere, see below) belong to the Maipure-Aruak linguistic group. Several different names and spellings exist in the literature about the names of those tribes. (Some papers about them: Bonilla, 2005; Brown & Lidstone, 1878; Chandless, 1868; Ehrenreich, 1891, 1897, 1948; Encarnação, 1900; Koch-Grünberg, 1919; Polak, 1894; Rivet & Tastevin, 1914-1924, 1921, 1938-1940; Souza, 1873; Steere, 1903, 1949; Tello, 1913).

spirit./ They generally have but one wife. Though the chiefs seem to have the/ right to take two./

They are noted for their fondness/ for paint and the geographical name/ of the river is said to mean the river/ of the painted Indians. They paint/ with (urucu) annatto which seems to/ be indigenous, and they mix this with/ balsam capaiva [sic; copaíba], to give it the requis-/ite consistency. They generally/ paint the body and the legs and arms/ with horizontal lines about an inch/ apart so that it gives them a little of/ the apearance of convicts. The men,/ especially the chiefs, generally wear/ the upper part of the face merely/ daubed with the paint, but the boys/ and young men use more care, one/ young fellow, who afterwards went/ with us to paddle our canoe, having/lines drawn on each side of the face,/ from the mouth and nose to the ears,/ another who seemed to be the dandy/ of the tribe had his hands and a broad/ line about his mouth painted black/ with some sort of paint. Like the other Indians of the Purus they all,/ male and female, have their lips and/ the nose pierced. This is done by/ the priest or medicine man and seems/ to be a religious rite. They are very/ much addicted to the use of snuff,/ which they make of a strong kind of/ tobacco of their own raising, but/ which is said to grow wild on the up-/per Purus. They cure this tobacco/ and then toast and smoke it over the/ fire until it is very dry, when they/ beat it in a mortar made of a case of/ the Brazil nut and mix with it the/ ashes of the hulls of the cacao fruit,/ which is very rich in potash, when/ the snuff is ready for use. They keep/ the snuff in curious boxes made of/ ampullaria shells, and for inhaling it/ have a couple of long hollow bones/ fastened together. The pour the snuff/ into a smooth clam shell or in the/ palm of the hand and thrusting one/ end of the bones into the nostrils they/ put the other in the snuff and draw/ it all up with one or two strong inhal-/ ations. I saw one old chief take a/ spoonful in this way and with little/ apparent effect, but a few grains of/ it nearly strangled me, much to the/ amusement of the Indians standing/ about. Our canoe men always had/ a box with them and when they were/ shivering with the cold after a storm,/ or when we stopped for the night af-/ter a hard days [sic] work they passed the/ box and bones around from one to/ the other. They told me that it was/ very good and warmed them up and/ rested them. Like the Indians of our/ country they have a real passion for/ ardent spirits, and the Brazilians of/ the river with their cachaca [sic; cachaça] have/ made them their most abject servants./ When they wish food the Pamanys/ are always ready to exchange a large turtle for a good drink, and when they wish to travel the Pamanys are their/boatmen

working steadily for them/ for two or three drams a day and/ what little their patrons may wish to/ give them at the end of the trip./

The first night of the voyage, ac-/cording to the custom of the river, we/ stopped upon a good clean looking/ sand beach, and laying down mats we/ had with us and sticking some stakes/ upon which to hand over musquito [sic]/ nets we were soon prepared for the/ night. While we were busy with this/ our Pamanys [Paumaris] had been at work col-/lecting wood and building a fire and/ they soon had a turtle killed and/ cooking. We endured the musque-/toes [sic] until we had eaten our simple/ supper of turtle and farinha and then/ crawled under our musquiteiras [sic; mosquiteiros] we/ went to sleep, but about about [sic] mid-/night I was awakened by the water/ dropping through upon me, and found/ that it was raining, but by lying on/ the sand and getting the mat over me/ I slept until morning. While I was/ getting the sand out of my eyes and/ ears the Pamanys [Paumaris] told me that there/ were (Americanos) on the same/ praia a little way beyond. I took my/ gun and started and found a great canoe darwn up to the shore, it was/ covered with matting and upon the/ sides were some curious paddle/ wheels, which were turned by a crank inside of the boat. Upon the/ sand, stooping over some sticks, were/ a man and woman to build a/ fire, they were using a little hand bel-/lows and had burned a great many/ matches, but had not yet succeeded/ in getting the wet wood to burn./ They were dressed in coarse blue/ drilling and their faces and hands/ were bound up with cloth, from the/ bites of the insects, and I had of/ couse difficulty in recognizing in/ them Mr. Piper the head of the Bo-/livian expedition, and his wife, whom/ I had seen nine months before at/ Para, fresh from the States with a/ company of thirty young men, all full/ of hope and ambition and expecting/ before this to have reached the gold/ mines of Bolivia. They are now scat-/tered all along the Purus and Ama-/zon. Mr. Piper was furnish [sic] by Sen-/hor Urbana [sic; Urbano] with boatmen and guides/ after the Americans all left him, and/ went on with his wife for several/ weeks until they had almost reached/ Bolivia when his guides became frigh-/tened and refused to go farther among/ the wild tribes and he was compelled/ to return. He is now going to Para [Belém]/ to await the steamer, and still talks/ of setting in Bolivia, and if pluck and/ perseverance will suffice he may yet/ succeed.

We made the rest of the trip with-/out incident, sleeping upon the sand/ at night and living upon turtle and/ farinha with what game I killed/ along the banks, the Indians now and/ then replenishing our

stores also with/ turtles' eggs which they found by fol-/lowing the broad tracks the turtles/ make when they come out at night/ upon the sand to deposit them./

This place is terribly infested with/ musquitoes [sic] and piums⁷⁶ which are if/possible worse than the musquitoes [sic], though they do not bite at night while/ the musquitoes [sic] cite [sic; bite] all the time. The/ piums¹ are of the shape of a honey/ bee, but no larger than a gnat and/ wherever they bite the blood settles/ beneath the skin, making a little black/ spot, and one can not stop here long/ without having the face and hands/ completely blackened with them./

J. B. STEERE

Letter XXXII [Peninsular Courier and Family Visitant, 11(9), March 1, 1872]

FOREIGN CORRESPONDENCE

Number XXXII

MANAHAN [sic] [Fortaleza do Ituxi], RIO PURUS, Nov. 16th, 1871.

Senhor Baptista, besides his trade/ with the Indians, has quite a number/ of people making rubber for him un-/der the system of pernage or patron-/age so common in this part of Brazil,/ and the woods about here are crossed/ here and there with their paths, so/ that I can follow them when I go/ hunting with no danger of getting/ lost. The trees of India rubber seem/ to be little if any thicker than below/ on the Amazon, and I should think/ they would not average more than four/ or five trees to the acre, not one-tenth/ of the whole number of trees./

To reach these trees in the easiest/ way the rubber-gatherer starts into the/ forest, following a straight course as/ nearly as possible turning a little to/ one side here and there to reach a/ tree, until he has about half the num-/ber he wishes, when he turns and cuts/ another path back to the barracks./ The number of trees generally reached/ in this way is from one hundred to a/ hundred and thirty, and the path as/ nearly as I can judge is generally/ two or three miles long, and perhaps/ more in some cases. From this num-/ber of trees it is said that twelve to/ sixteen pounds of rubber can be made/ in a day; but they seldom tap all the/ trees, and think that six or seven/ pounds per day of

labor is a large av-/erage. During the rainy season rub-/ber is not made, - because the water/ mixing with the rubber injures its/ quality, and when the trees are wet/ the clay with which the cups are fas-/tened to them will not stick. Rain is/ already so frequent that they cannot/ work more than half of the time. On/ account of high freights and duties/ paid at Thames as well as at Para [Belém],/ rubber is worth here but ten to twelve/ mil reis, the aroba [sic; arroba] of thirtytwo/ pounds, or sixteen to twenty cents per/ pound. The poor rubber gatherers/ must pay from this famine prices for/ the cachaca [sic; cachaça] and farinha that he uses/ and the coarse cloth that covers him,/ so that he runs deeper and deeper/ into debt and looses all hope. These/ men are bought and sold as regularly/ as if they were slaves, and are com-/pelled to sell their rubber and to buy/ their provisions of their patron and/ at his own prices./

There is much Balsam *Copaiva* [sic; copaíba] sent/ from here, but the collecting is almost/ entirely done by the Indians. The/ trees are much larger and finer than/ the trees of India rubber. The bal-/sam, or oil, as it is called here, does/ not exist in the bark as the milk of/ the rubber, but is diffused through the/ wood like the resin of pine and other/ coniferous trees. Those trees only/ are tapped that from peculiar knots/ are known to have the oil stowed up/ in large rifts, and from one of these/ several gallons is often procured; but the Indian may hunt several days/ before he finds another proper tree./

I also find the salsaparilla growing/ here. The plant is a green vine/ thickly covered with short curved/ thorns. This vine runs trailing over/ low trees and bushes, and sends out/ just at the level of the ground straight/ roots that often run to a diatance of/ fifteen to twenty feet. If these roots/ are properly gathered, leaving enough/ to supply the plant, it will give anoth-/ [sic] crop at the end of two years, but the/ gathering is left to the Indians, and/ they were never known to be pro-/vident. To the Indians is also left/ another article of trade called man-lteiga, or turtle butter, which is much/ used in ths country for cooking and/ burning. I saw it in the process of/ manufacture on my way up from/ Ituchy. We saw some Pamarys [Paumaris] one/ morning hard at work on a praia,/ and as I wished to see this people un-/der all phases, Senhor Baptiste [sic; Baptista] or-/dered the men to land. As we walked/ along the beach towards the Indians/ we came up upon two or three unfortu-/nate turtles that had been taken while/ in the act of laying their eggs and/ turned upon their backs. Further on/ was a pile of mats that when put up/ formed Pamary [Paumari] houses, and besides it/

⁷⁶ Pium – name given in Brazilian Amazonia to Simuliidae (Diptera).

several chickens, a few of which the/ Pamarys [Paumaris] invariably have with them/ in all their wanderings. The cick-/ens seem to rather enjoy this traveled/ life, and an old hen and chickens/ were peeking at some turtle eggs that/ had been thrown there for their break-/fast, as contentendly as if they had/ always lived on that same praia./ Higher upon the beach we came upon/ the results of the morning's work, -/ several great heaps of butter and/ eggs, and the ground for quite a dis-/tance all dug up with paddles, which/ the Indians had used for spades, and/ beyond these the Indians themselves/ still hard at work. A couple of men/ seemed to be playing the part of the/ lord's [sic] of creation and were superin-/tending the business. They had dug/ over the thicker bed, and a couple of/ boys were at work about his edges/ with sharp sticks, which they would/ press into the sand here and there./ When the stick, to their practiced/ senses, told of treasures hidden be-/low, they scraped away the sand and/ pulled out the eggs, generally about/ a hundred in a place, but sometimes/ as many as a hundred and thirty or/ forty - about a peck measure fall./ Those that are found together are all/ laid by one turtle. The turtle digs a/ small hole with the hind foot to a/ depth of a foot, and then enlarges it/ below like a cistern it until [sic] will hold/ her eggs, which she packs in very/ closely. There were fifteen or twenty/ bushels already in heaps like pota-/toes, on the sand, and three or four/ wretched, dirty looking women, each/ dressed with a scanty piece of dirty/ cloth over the shoulders and the/ tanga about their loins, were still/gathering them together in baskets,/ one of them carrying a child on her/ hip supported by a strap over her/ shoulder. The eggs are not all de-/posited at the same time, and while/ some were just laid others were just/ ready to break the shell and run, and/ in some cases the boys would break/ through upon a whole nest of the/ little turtles hatched, and only await-/ing a favorable opportunity to dig out/ and make their way to the water./ When we dropped these upon the/ sand they invariably made their way/ directly toward the river, though the/ ground was quite irregular, and they could not have found the direction/ by the descent. I afterwards often/ saw where families of them had brok-/en out of the sand, and I noticed/ that there would often be several/ tracks in a circle about the place of/ exit, before they hade started off to/ the river, as if they had found the/ way in the same manner that the bee/ does that flies in a circle about the/ flower from which it has procured its/ honey, before it darts off home./

The Pamarys [Paumaris] carefully secured/ these hall [?] little fellows in baskets for/ future eating. They

are generally/ roasted, fifteen or twenty being strung/ like beads upon a stick and stuck up/ before the fire. They might not be/ considered very good at home tables,/ but they are considered quite a lux-/ury here.

After the women had gathered the/ eggs together, they carried them to/ the canoes which had been previously/ emptied of chickens, dogs, &c., and I/ saw the process of making manteiga,/ though I hope it may never trouble my/ memory while I am eating in this/ country. The women filled the canoes/ half or two thirds full of eggs, and/ and [sic] after cutting away awhile at/ them to break the shells, they all got/ in and tramped them. After they/ are sufficiently pressed or mixed in/ this way they are allowed to stand in/ the sun, when the oil rises to the top/ and is dipped off and bottled to free it/ from what water there is in it, when/ it is put into earthen jars or large/ glass flasks, when it is ready for ship-/ment.

J. B. STEERE

Letter XXXIII [Peninsular Courier and Family Visitant, 11(10), March 8, 1872]

FOREIGN CORRESPONDENCE

Number XXXIII

MANAHAN [sic] [Fortaleza do Ituxi], RIO PURUS, Nov. 17th, 1871.

After my host, Senhor Baptiste [sic; Baptista],/ had arranged his business at home/ to his satisfaction, he signified his/ readiness to accompany me to the/ malocca [maloca] of a tribe of Indians called/ Jamamagy [sic; Jamamadi or Yamamadi], - a wild and almost un-/known tribe with whom he had opened/ a communication and a small trade,/ through the Pamarys [Paumaris], some of whom/ speak their language and sometimes/ visit them. It was necessary to first visit the malocca [maloca] of the Pamarys [Paumaris] so/ as to relieve our boatman, and to get/ an interpreter to speak with the/ Jamamagys [Jamamadis or Yamamadis]. We paddled up a long/ lake which seems to have once/ been the bed of the Purus, having/ the same praias and windings, while/ the river itself now takes a much more/ direct course at this point. The Cip-/atiny [Sepatini], a small river with dark water,/ has its mouth at this lake and this/ likely keeps it open to the main/ stream. We followed up this lake for/ several miles, the shores being cov-/ered with water fowl and the water/ often broken by fish rising to catch/ the insects flying and floating about/ them, or chasing each other just be-/neath it. Paths frequently led into/ the woods where the Indians had/ been hunting or had rubber camps,/ and just before night we drew up at/ a praia which the Pamary [Paumari] vil-/lage of twenty-five or thirty huts was/ placed. Just before their doors a/ little fleet of canoes was moored, and several stake pens in the edge of the/ water to preserve spare turtles, showed/ that this was a more permanent resi-/dence than the other I had visited./ A great raft or jangadi [sic; jangada] was also an-/chored near by, the ark to which they/ would flee when the winter floods/ should drive them from the narrow/ sand beach. It was formed of two large logs, covered with thin strips of/ palm wood lashed fast with vines./

As we landed, a great crowd of the/ men and boys came down to the/ boat to get the drink of cachaca [sic; cachaça],/ which they always expect when their/ patron visits them, and among the/ rest the old chief moved slowly along/ clothed as he supposed, in a most/ dignified garb - a very brief shirt and/ a pair of cotton socks. Our crew/ was from this village, and I was/ anxious to see how they would be/ received by their families and friends;/ but I was disappointed in seeing no/ hearty greetings, such as civilized/ people give their returning friends,/ our boatmen receiving and giving/ only a few intranslatable grunts, eith-/er from the stoicism natural to the/ race, or because they did not choose/ to show any feelings before us; but/ the chief finally entered the boat, and/going to where one of the boatmen/ was still sitting with a paddle in his/ hand, he took his face between his/ hands and gave it a good smart rub-/bing, apparently to the satisfac-/tion of both./

While the crowd were getting their/ dram of Senhor Baptiste [sic; Baptista], I went on/ shore to see the town. The huts,/ though likely standing in the same/ place six ou eight months of the year,/ were the same that I had seen before, / – low oven-shaped things covered/ with long narrow mats, and floored/ with the same, of finer make. These/ mats are made light and thin so as to/ pack into their canoes, and the Pam-/ary always has his house with him/ and can set it up and go to house-/keeping within a few minutes, or can/ take it down and pack it in his canoe/ in the same time. The first sight I saw/ in the village was an old man seated/ naked before his door on a mat placed/ on the sand. He was entirely covered/ with an ashgray leprosy. He held in/ his hand a long, sharp-edged shell, of/ a species I afterwards often saw used/ for the same purpose, and also for/ spoons, and was engaged in scraping/ his itching skin with it. I thought/ that I had found in the old Pamary [Paumari]/ oven a better

example of patience/ than or Bible-model Job, for the/ Pamary [Paumari] seemed to keep a jolly face/ with all his trouble, and he did not/ know enough to write a book of/ complaint to trouble de world with./

As we passed around one of the/ huts we found several of the women,/ who were likely the wives, mothers/ and sweethearts of our crew, seated on/ the sand around a little dish of paint,/ and using it in a way that would as-/tonish their white sisters who some-/times add to their beauty by the same/ means. They were dressed in the/ national garb of a couple little wood-/en pins in the lips and the little apron/ or tanga, of cotton twine, which was/ also colored red. They were dipping/ the points of their fingers in the paint/ and then drawing them horizontally/ about the body, legs and arms, thus/ producing that curious convict ap-/pearance that I had before noticed./ After each one had painted so far as/ she could reach, her neighbor sitting/ behind her completed the job, and/ they were soon decorated to their/ heart's content and likely accord-/ing to the latest and most approved/ fashion./

I had seen the shell-box and bones/ used by the Pamarys [Paumari] in taking snuff,/ and had brought along some trinkets/ to trade for one of them, as I knew/ money was not current among them./ Placing them in Senhor Baptiste's [sic]/ hands I soon had quite a little market,/ each hurrying off to his hut for a few/ shells, or a basket, or something else/ that they thought I would want, and/ I also bought some of their tangas,/ which they call by the Portuguese/ name for trowsers./

Having completed our trade and/ procured our men, who seemed to/ be rather unwilling to go with us,/ we paddled down the lake and en-/camped for the night on a sand-bar/ near the mouth of the little river Mar-/mores [Mamoriazinho], upon which we expected to/ find the Jamamagy [Jamamadi or Yamamadi]. Early the next/ morning our men were at work pull-/ing us up the little river which is but/ four or five rods wide, and now quite/ shallow, though during the flood it/ would float an iron-clad./

The river is known to be inhabited/ yb [sic; by] several wild and unknown tribes,/ and even the Jamamagys [Jamamadis or Yamamadis] have been/ visited but once or twice, and it did/ not conduce especially to my peace/ of mind to know that their army could/ reach us easily from the bushes on/ either side; but we passed on without/ incident, save seeing many otters that/ go in little companies of seven or/ eight. They were quite tame, and/ would come near us and raise the/ fore part of their bodies out of the/ water to look at us, holding the fore-/feet as if they were hands. We

fired/ several times at them, as I wished a/ skin; but if we killed any they sunk/ to the bottom. About noon we/ came to the post of the Jamamagy [Jamamadi or Yamamadi]/ village; but the canoes were all gone,/ and our Pamarys [Paumaris] said they had gone/ up the river to dig salsaparilla. We/ went on until nearly night, but with/ little hope of finding them, and then/ turned back and ran down the dis-/tance it had taken us all day to make,/ in two hours, the stream is so rapid./

I revenged myself for not finding/ the Jamamagys [Jamamadi or Yamamadi], by impressing an old/ Pamary [Paumari] who spoke their language,/ and getting as much of it from him as/ I could. It seems to be closely re-/lated to the Pamary [Paumari], and they may/ be a part of that tribe that have been/ driven back to the woods and kept/ there until their customs have been/ changed. My main object in coming/ here was to see the Indians in their/ natural state, and as I have seen the/ Pamarys [Paumaris] and found a visit to the/ Jamamagys [Jamamadis or Yamamadis] impracticable, I shall re-/turn towards civilization as fast as/ possible./

J. B. STEERE

Letter XXXIV [Peninsular Courier and Family Visitant, 11(11), March 15, 1872]

FOREIGN CORRESPONDENCE

Number XXXIV

MANAOS [Manaus], Nov. 30th, 1871.

After my trip up the Marmorea [sic; Mamoriazinho], as/ the time for the steamer was drawing/ near, Senhor Baptiste [sic; Baptista] gave me a/ couple of Pamarys [Paumaris], and I started/ down the river again, stopping on the/ way at Utary [Utari] where the high land/ comes to the river, to examine the/ rock. I also stopped at the house of/ Mr. Berger, a Frenchman, who has/ crowded up the river with the rest in/ the search after India rubber. He/ has thirty men under his patronage,/ and is making large amounts of rubber./ The pests, mosquitoes and piums, are/ still worse here than at Marrahan [Fortaleza do Ituxi]/ above, and it is impossible to eat un/-less under a mosquito net. A few/ days before, one of his men had died/ from their bites and nothing else./ Nearly every one is covered with/ wounds, and if they did not go down/ the river during the rainy season to/ recruit, it

is likely many more would/ die. The bite of the *piums* seems to/ be very poisonous, producing an in-/tolerable itching, and leaving little/ black blood blisters under the skin./

Mr. Berger seemed to take much/ interest in my business and gave me/ some skins he had preserved, and, or-/dering a good supper which I relished/ after my fare of turtle's eggs and/ farinha, he sent me on my way./

My next stopping place was at/ Labria [sic; Lábrea], settled by Colonel Labria [sic; Labre⁷⁷] of/ Maranham [sic; Maranhão]. He spoke English, and I/ found that he had traveled extensive-/ly in Europe and the United States./ He has opened quite a large planta-/tion, though here but eight or nine/ months, and has corn and mandiocal and sugar cane almost ready to har-/vest. His improvements over the/ slow shiftless ways so common with/ the Brazilians is general, show the/ advantage of travel and I could almost imagine myself in/ a backwoods clearing at home. He/ has seventy persons with him - quite/ a little village, and among them an/ American, Mr. Ellis, from Cambridge,/ Massachusetts, who was another of/ the Piper expedition. He was badly/ treated by the insects but seemed to/ keep good courage, and expects to/

Colonel Antônio Rodriges Pereira Labre was born in the then Province of Maranhão. When 20 years old he went to Rio de Janeiro to study Law, becoming influenced by liberal ideas and the anti-slavery campaigns. Back to Maranhão, he worked as a lawyer, having defended 480 slaves and winning the causes. By that time Western Amazonia in Brazil was being conquered and new perspectives of easy and rapid riches were opened, especially with the discovery of rubber trees ("seringueiras") along the affluents of the right margin of the Amazon river. Labre decided therefore to go to Belém. There he met a son of Manuel Urbano da Encarnação, who told him about the Purus River. Labre decided to try his luck in that region. He went to Manaus and from Manaus to the mouth of the Purus, going up the river in 1869, on board the steamer Madeira, in search of a suitable place to establish himself. In 1871, returning from a trip to northeastern Brazil, whence he brought several men from the province of Ceará to colonize the Purus, he chose, by advice of Major Carlos da Fonseca, a place called Terra Firme de Amaciari, below the mouth of the Ituxi river, where Manuel Urbano da Encarnação had tried unsuccessfully to establish a plantation and a chapel, and there founded a village that he called Lábrea (after his family name). He became the owner of several farms and cattle and horse herds, opened several roads and promoted the development of the region. In 1872 he published a booklet about the Purus (Labre, 1990). From 1870-1872 he made several explorations overland with the engineer Alexandre Haag, to try to build a road linking the port of Lábrea with that of Florida, in the Beni River in Bolivia (Labre, 1887). In 1888 Labre published a work about the rio Ituxi. He was also a Deputy of the Province of Amazonas and on May 7, 1881 proposed a project abolishing slavery in that Province of the Empire. He never married and left no descendents. (Bittencourt, 1918; Ferrarini, 1981: 55-82).

make some money with the rubber/ before he goes home. He was tem-/porarily crippled by the bursting of a/ powder horn, and spent his time in/ assisting me in my collections. I/ found here beds of rocks much like/ those below at Ariman [Arima] and filled/ with fossil wood, of which I made a/ good collection. Living near Col./ Labria [sic; Labre] I found an Indian who ap-/pears to be a half breed Hypurina [Apurina]/ and Pamary [Paumari], speaking both languag-/es well, and having many of both/ tribes about him, and I now spent/ several days of my time in completing/ lists of words in these languages, and/ my friend, Mr. Ellis, helped me to/ write down their music. The Pam-/arys [Paumaris], who never think of fighting,/ sing of the turtle and the toucanbo [sic; tucano] and/ other objects that are familiar to/ them. The following are translations/ of some of their songs: "My moth-/er when I was young, carried me/ we [sic] with a strap on her back – with a/ strap she carried me on her back, but now I am a man and don't need my/ mother any more." "The toucano [sic; tucano] eats fruits in the edge of my garden,/ and after he eats he sings." "The onca [sic; onça] fought with me and I am weary,/ I am weary." Another song of the/ the [sic] turtle evidently alludes to the/ wondering habits of the animal. "I/ wander, always wander, and when I/ arrive where I wish to go I shall not/ stop but still go on." One of these/little songs, with music just as simple,/ they will chant by the hour, as they/ are at work paddling or towing the/ canoe./

The songs of the Hypurinas [Apurina], who/ are a warlike race, always treat of/ war or love, though they are as sim-/ple as those of the Pamarys [Paumaris]. The/ following is the translation of a little/ [...].

"The leaf! The leaf that calls my/ lover when stuck in my girdle." She went into the woods and brought us/ the leaf which is said to have much power. The music is quite similar to/ the music of a bird of this country/ and may have been taken from it./ The war songs are sung to strange/ guttural music, and the singers draw/ deep breaths and make hard work of/ it. The following are translations/ from some of them: "Bring your/ arrows; I am a warrior and have my/ arrows ready and wish to kill you." "I have returned victorious from the/ battle, and no one can say any more/ that I am not a warrior." "I am a serpent, and when I bite my enemy/ dies." "I go to die: my enemy shall/ eat me."/

These Hypurinas [Apurina] are accused of/ eating human flesh, and there does/ not seem to be much reason for/ doubting, though their feasts are/ generally made upon their enemies of/ other tribes and their own. They/ generally treat the whites and Tapuios/

or Christian Indians with great kind-/ness. Mr. Piper and his wife were/ among them several weeks entirely/ unprotected, and never received any-/thing but kindness from them./

On the twenty-third of the month be-/fore I was well through with my work/ with the Indians, the boat came up -/ this time an American boat just from/ the shop in Wilmington, Delaware./ It was much more pleasant than the/ dark, low English boats that navi-/gate the river, and I almost felt at/ home when I got on board. The/ English boats are nearly all made in/ Liverpool, and one sees here and/ there upon the engines and other/ works, "Laird Bros., Birkenhead Works" - an inscription that Ameri-/cans can not read yet with pleasurable/ emotions. On board the boat/ was an American engineer, in/ charge, and the chief engineer of the/ line, a Brazilian, who was educated/ in England, so that after a pleasant/ passage without incident, I arrived/ here yesterday. After packing and/ shipping my specimens I shall take/ the steamer, on the eleventh of next/ month, for Peru.

J. B. STEERE

Letter XXXV [Peninsular Courier and Family Visitant, 11(13), March 29, 1872]

FOREIGN CORRESPONDENCE

Number XXXV

PEBAS, PERU, December 25th, 1871.

After my return from Manaos from the/ river Purus I had more than I could/ well do during the ten days before the/ sailing of the steamer, in packing and/ forwarding the collections I had made,/ and in preparing for the journey to/ Peru, but my troubles were increased/ by the sickness and death of a young/ Englishman who had been one of the/ ill-fated Bolivian expedition under/ Mr. Piper. He had been several/ months on the Puma [sic; Purus] with poor food,/ and exposed to the sun and rains in/ an open boat, and had then returned/ to Manaos in poor health, but had/ gone to work hoping to earn money/ to pay his passage back to the United/ States, but was soon taken with a fev-/er of which he died three days after/ the attack. The few of us who spoke/ English did what we could to make/ him comfortable, but this was little/ enough as we were all very busy, and/ every one else seemed perfectly indif-/ferent in regard to him. In examin-/ing his papers after his death, we/ found that he was a native of London,/ England, where he has parents still/ living. He had gone to the United/ States where he was doing well, and/ had a small piece of land somewhere/ in Massachusetts, but the hopes of/ sudden riches to be made in the mines/ of Bolivia brought him to his death./

He was, fortunately, a Roman Cath-/olic, so that we could procure the rite/ of burial for him. We hired bearers/ and a rude bier, and four of us, two/ Americans, an English speaking/ Brazilian and a French Jew, followed/ it, a long walk in the hot sun through/ the city and out into the country be-/yond, to the cemetery, passing on the/ way the grave of one of his country-/men who had not been so fortunate as/ to die a Catholic, and had conse-/quently been buried like a dog, in the/ bushes by the sides of the road, with-/out a mark to show his resting place./ The bearers deposited the body in the/ little chapel belonging to the cemetery, where a priest hurriedly mutter-/ed the burial service over it, and we/ were told that we could go, as we had every thing according to/ the common practice, but we chose to/ stay and see him carefully and de-/cently put in his grave according to/ the customs of our own land. The/ only funerals here are at the death of/ distinguished persons. It is not cus-/tomary for the family of the deceased/ to follow the corpse to the grave, a/ friend or two generally attending to/ the burial. Another curious custom/ which seems to be quite general/ among the lower classes, is that of/ hiring coffins, several of which we/ saw in the chapel for that purpose./ When a person dies a coffin is taken/ to the house, and the body carried to/ the cemetery in it, and then taken out/ and buried, while the coffin is reserv-/ed for fresh occupants. The Brazil-/ian cemeteries are square enclosures/ surrounded by mud or stone walls and/ the grass is carefully dug from them/ so that the bare red clay is left to/ bake in the sun and wash in the rain./ A flower or tree is rarely planted, and/ black wooden crosses are generally/ the only thing to break the blank/ monotony. The lot of the poor Eng-/glishman buried in the shade of the/ bushes by the road side seemed al-/most preferable though it did not add/ to our peace of mind to think that if/ we should die in this far off land we/ should also be cast out like beasts./ At Santarem [Santarém] there are several graves/ of Americans and English just out-/side the wall of the cemetery as if the/ friends of the dead had tried to get/ them as near within the sacred soil as/ possible instead of making a pleasant/ burial place of their own. The ceme-/teries of the country belong to the nation and not to the Roman/

Catholic Church, and as the govern-/ment claims to protect and allow all/ religions it seems as if it should set/ off a place of internment for those who/ are not Catholics./

On the eleventh of this month I/ finally went on board the steamer/ Icamiaba, Commandante Nuno, and we/ were soon steaming down out of the/ coffee colored water of the Negro into/ the Amazon. Manaos is the capital/ of the Province of Amazonas, which/ extends from near Obidos [Óbidos] to the/ frontiers of Peru. The city is built/ on high broken land, near the mouth/ of the Negro and has the most claims/ for beauty of situation of any Brazil-/ian town I have seen, and with the/ trade of the Madeira, Purus and the/ Rio Negro, united to that of the upper Amazon, which has to all come into its/ port and pay duties, it must keep its/ place as only second to Para [Belém] on the Amazon./

My recollections of Manaos are not/ of the most pleasant kind, and its/ name will always be associated with/ memories of scorching hot days, (the/ hottest I have experienced on the/ Amazon) spent in running from one/ official to another, and finally to the/ city council, for a petty permission to/ examine some Indian remains, which/ had hardly required to be asked for/ below. More vexations than this was/ my frequent conflict and contact with/ the Portuguese cartmen and boatmen,/ the latter especially. There is not a/ wharf on the Amazon or its branches,/ and the steamboats lie at anchor/ while the baggage and passengers are/ landed by small boats that are always/ owned by Portuguese. These men/ show real Irish blarney and impu-/dence, and are given to charging/ strangers several prices, but they/ seemed to be especially unreasonable/ in Manaos./

Commandante Nuno has the repu-/tation of being the best officer on the/ Amazon, and his boat was a model of/ neatness and order, but it seemed to/ cost him a great deal of exertion to/ keep his crew in the proper state of/ discipline. Our passengers were a/ gentleman of Teffe [Tefé] returning with his/children, a captain of engineers busy/ with his maps and charts, going with/ his wife to Tabatinga to take charge/ of the fortifications, and a couple of/ young men on their way to Iquitos./ At the bow of the boat were a couple of/ English machinists also on their way/ to Iquitos to work in the shops of the/ Peruvian government there. They/ were surrounded by cattle, and sheep,/ and turtles, and the usual crowd of/ Indians and Negroes that make up the/ second and third class passengers, on/ the Amazon steamers. They had no/ cabins but swung their hammocks un-/der the awning, just out of reach of/ the live stock below. They

were/ fresh from English homes and looked/ rather blue over such treatment./

We generally stopped once a day/ at some little village on the bank to/ wood up, and on the eighth day from/ Manaos we came to anchor in front of/ Tabatinga, the frontier port of Bra-/zil, having passed Teffe [Tefé], Fonte Boa, and San Paulo [São Paulo de Olivença] far below, where Bates/ and other naturalists have spent much/ time collecting. Tabatinga is a lit-/tle village of *palha* huts, with an im-/mense barrack of the same material/ and a couple of mud houses for the/ officers. A few cannon along the/ bank were the only signs of fortifica-/tions I saw, the rest being on paper,/ a hundred and fifty soldiers are quar-/tered here./

Our captain of engineers now left/ us and a lieutenant came on board to/ examine our passports, the Brazilian/ law requiring these to be (vised) by/ the police, in European style, on en-/tering and leaving each town, though/ from my experience I should say the/ law is not very thoroughly enforced./ We arrived at Loreto, a Peruvian/ town, the next day and drew up be-/side the Peruvian steamer, the Moro-/na while the crews transferred the/ cargo. While the vessels were lying/ thus the Morona broke loose from her/ cable and went drifting past us down/ stream, tearing of guards and railing/ from both boats, and was sixty rods/ below before they could get out an/ anchor. At the same time a large/ canoe landed with wood upset, and/ the wood, paddles, men and all went/ floating down stream, but they right-/ed their boat and got to shore a mile/ below. The rest of the cargo was/ transferred in the native canoes/ while we passengers and our baggage/ were taken in the steamer's boats, rather a dangerous undertaking as/ the current is very strong./

I had now at one step, exchanged/ the Brazilians for the Peruvians and/ the Portuguese language for the Span-/ish. There is so much similarity be-/tween the two languages that no one/ who speaks one thinks of learning the/ other, and I saw Brazilians and Peru-/vi-ans talking together each in their/ own language, but understanding/ each other well enough to keep up a/ brisk conversation./

After two days steam in the Moro-/na, we arrived at this place where I/ was received kindly by Mr. John/ Hawxwell⁷⁸, an English naturalist and/ collector, and I shall likely stop here/ a month and then go on to Iquitos./

J. B. STEERE

Letter XXXVI [Peninsular Courier and Family Visitant, 11(17), April 26, 1872]

FOREIGN CORRESPONDENCE

Number XXXVI

PEBAS, PERU, January 15, 1872

[MISSING]

Letter XXXVII [Peninsular Courier and Family Visitant, 11(19), May 10, 1872]

FOREIGN CORRESPONDENCE

Number XXXVII

PEBAS, PERU, January 23, 1872.

The month that I had allotted to/ this place is past, and to-morrow the/ steamer will be here on its upward trip/ and I shall take passage for Iquitos/ two days [sic] voyage above here. I have been stopping with Mr. Hawxwell, who/ has done all in his power to make my/ stay profitable. I have spent most of/ my time collecting fossils from the/ bed found here by Professor Orton⁷⁹ of/ Vassar College. They are found

⁷⁸ John Hauxwell – Resided 30 years in the Amazon. Cope (1869, 1885) described fishes, amphibians and reptiles collected by

James Orton was born on April 21, 1830, in Seneca Falls, New York. When 13 years old one of his teachers introduced him to the world of natural sciences, inspiring in him a deep love of chemistry and later mineralogy. James and his brother took to the woods surrounding their home, collecting living specimens of plants, insects and minerals, which they studied in the laboratory they built for themselves in the basement of his home. At age 16 James began writing poems and scientific articles based on his experiments, and at 17 he and two of his brothers were sent to school in Oxford, New York. Also that year Orton submitted the idea for his first invention, a device that would improve the functioning of the Leyden jar, to Scientific American. Later in the same year, Orton submitted a scheme for adapting for use in lighthouses of the "Drummond light", the high intensity light of incandescent lime or "limelight" developed by the Scottish engineer, surveyor and statesman Thomas Drummond. Scientific American published a sketch and brief explanation of the invention, calling it an "ingenious method". James's relationship with Scientific American continued to blossom, and the journal published twenty-one of his articles on mineralogy and entomology between 1849 and 1853. The following year, undaunted by his failure to secure publication of his first comprehensive work, a dictionary of scientific terms, Orton set out on a personal excursion, walking from Oxford, New York, to Syracuse, in order to see a locomotive for the first time. Rejuvenated, he

returned to his work, and at 19 published his first book, The Miner's Guide and Metallurgist Dictionary. Coinciding with the California gold rush, the book was a surprising success, later appearing in five revised editions as the widely read Underground Treasures: How and where to find them. Orton entered Williams College in 1851. Graduating from it with honors in 1855, he decided to steer away from his scientific career and to enter into the Andover Theological Seminary. Between 1855 and 1866 he dedicated his life to religion and family, graduating from Andover in 1858, and shortly thereafter marrying Ellen Mary Foote. On July 11, 1860 he was ordained pastor of the Congregational church in Greene, New York. In 1861 he headed a church in Thomaston, Maine, where he remained until 1864, when he became the pastor of a church in Brighton, New York. In 1866 he reentered the world of science, when the University of Rochester offered him a temporary appointment as substitute for his former classmate and closest friend, Professor Henry Ward, who was taking a leave of absence to study in Europe. Orton, who had been profoundly affected by Charles Darwin's On the Origin of Species, was happy to return to his first love. Orton started a correspondence and friendship with Darwin, who encouraged and inspired Orton to explore South America, which was to be the defining experience of his later life. In 1867 Orton was selected by the Lyceum of Natural History at Williams to lead an expedition to South America. The expedition was cofounded by Williams and Orton himself, and the Smithsonian Institution donated the scientific instruments needed and arranged to have the specimens returned to the United States. With this project Orton began the series of detailed journals of his expeditions.On July 19, 1867, Orton and his group completed the crossing of the Isthmus of Panama and reached Guayaquil, Ecuador. This first expedition, in which he crossed South America from west to east, by way of Quito, the Napo, and the Amazon, he discovered the first fossils ever found in the valley of the Amazon, and his specimens of flora, fauna, fossils, minerals and anthropological artifacts were displayed in numerous institutions throughout the United States, including the Academy of Natural Sciences, the American Museum of Natural History, the Society of Natural History, the Museum of Comparative Zoology at Harvard, the U. S. National Museum and the Natural History Museum at Vassar. He wrote of his journeys and findings in the 1870 book, The Andes and the Amazon. In 1869 Orton accepted a professorship at Vassar College, and from 1869 until his death he served as chairman of the Department of Natural History and curator of its museum. In 1870 he published Comparative Zoology: Structure and Systematics. In the spring of 1873 he organized and personally financed his second expedition to South America, this time traveling in the opposite direction of the first expedition, from Belém to Lima and Lake Titicaca (an account of this is given in the third edition of his The Andes and the Amazon (1766)). Upon his return to the United States he immediately returned to his teaching at Vassar and began planning his third expedition to South America. In 1876 Williams College awarded Orton a doctoral degree, on the basis of his work in South America as well as the research he conducted while teaching at Vassar. In mid-October of 1876 he embarked on his third expedition to South America. Little is known exactly what occurred during this final expedition. What is known is that traveling from Trinidad, twenty miles from the Beni, Orton's escorts mutinied, taking with them one of the boats and most of the supplies. Attempting to suppress the uprising, Orton was struck on the head and suffered severe hemorrhaging. Knowing that he would not be able to

in/ blue clay and are many of them per-/fectly in form and even color. This/ clay is divided into several horizontal/beds by thin seams of earthy coal./ These fossils first appear near Toba-/tinga [sic; Tabatinga], and are seen in the river bank/ upon one side or the other to this/ place and how much further up I do/ not know. I have been fortunate/ enough to find several species of shells/ that are yet undescribed, as well as a few fish bones, corals, crustaceans,/ etc., that have not been noticed be-/fore. After I was well settled and/ ready for work, Mr. Hawxwell took/ me to visit the Governor of the village/ who furnished me with two boys to/ hunt for me with the blow gun. I/ paid them a dollar apiece, and for this/ they were to hunt for me ten days each,/ finding their own food. I thought/ this very cheap, but before the ten/ days were up, I concluded that I had/ paid them enough, though they/ brought me a few good birds. Pebas is/ most horribly plagued with musquitos [sic]./ There has not been an hour or minute/ that one could rest quietly outside of/ musquito [sic] bars since I have been/ here, and no thin betting like that used/ at home will do for the musquitos [sic] of/ the Amazon, nothing thinner than/ sheeting or calico will answer, and/ this keeps out the air as well as the/ pests, so that one must choose be-/tween being suffocated and being eat-/en alive. While eating, or preserving/ my collections or writing, I am con-/tinually reminded of them, for I must/ work with one hand and fight them/ with the other. The amount of suff-/ering caused by these seemingly little/insignificant creatures in this world/ in which they are even more cosmop-/ olitan than man himself, must be enor-/mous, according to my present judg-/ment, more in this country at least/ than all kinds of disease added to/ death itself. Sickness and death come/ and their pain has an end, but these lit-/tle creatures are continually at work,/ giving neither the tired nor sick rest,/ onemust [sic] be continually in motion, or/ they will settle upon him in a cloud./ They do not disappear where the tim-/ber iscut [sic] away from about the house, as/ they do in the States, but are even/ worse in the open places, than in the/ dense woods./

successfully complete his expedition, he began to make his way back home. Orton, and what was left of his group, paddled 260 miles back up the Mamoré River, where they followed the Yacuma River westward for about 100 miles and then traveled 200 miles by mule to Lake Titicaca. Finally, on September 24, 1877, they reached the shore of Lake Titicaca. They boarded the schooner Aurora, which took them across the lake on a twenty-four hour journey to Puno, Peru. The strain and sickness had been too much for Orton to bear, and he was found dead at daybreak on September 25, 1877, at the age of forty-seven. He was buried on the small island of Esteves, located a few miles from Puno. (See also Miller, 1982).

The Peruvians here are generally/ natives of Lima, or of the towns/ within the mountains, Chachopoyas [sic; Chachapoyas],/ Moyobamba, etc., and are on that ac-/count likely much larger, fiercer look-/ing than the Brazilians of the Ama-/zon, and they appear to be more en-/ergetic also,/ but from what I have seen/ of them during the last month I should/ judge that their energy was hardly ex-/pended. Their only business here is/ buying a few hammocks of the wild/ Indians80, and plantains and dried fish/ of the civilized ones, for which they pay/ in beads, hardware, cachaca [sic; cachaça], and poor/ cotton cloth at enormous profits. The/ hammocks are sent down the river to/ Brazil, and are the only article expor-/ted to balance the immense importa-/tion of hardware, wines, provisions,/ etc. When there is an overplus of fish and plantains, they are sent to/ Iquitos where the government factor-/ies have built up a market. When/ this little trade is transacted, they pass/ the rest of their time in gambling/ with cards and dice. They are most/ persevering players, playing all day/ and a great part of the night. After/ they have played away what little/ money they have, they gamble with/ the promise to pay. A person in one/ night losing several hundred dollars with no prospect of paying, unless in/ some other game fortune favors him./ One man since I came, raised a stake/ by raftling his chickens./

They live without marriage, not only/ with the Indian women, but with their/ own race, marriage being supposed to/ bring with it more disadvantages than/ benefits. They are even worse than the/ Brazilians, for while in the city of Ma-/naos there is about one couple mar-/ried in three that should be, here there/ are none, or none worth mentioning./ With such customs, there is no foundation upon which, to build up moral-/ity. The priests are still more open-/ly immoral than in Brazil, some of/ them having a woman in each village/ within their curacy, and the people of/ course have very little respect for mat-/ters of religion./

The manner of life is quite differ-/ent from that of the Brvzillians [sic]. The/ hammock the universal bed on the/ Brazilian Amazon, giving place to cots/ or low benches on which a piece of/ carpet is spread, or the bark of a tree/ pounded until it resembles coarse felt-/ing, this with a blanket is the bed and/ over all a musquito [sic] net is flung. The/ farniha [sic; farinha] of Brazil has disappeared, and/ in its place plantains boiled green are/ used for bread. They are coarse and/ hard, and still worse than farinha, but/ a kind of the

and salt,/ and making the responses. At the/conclusion the god father threw a/ handful of silver coins among the In-/dian boys at the door of the church/ for a scramble, and those witnessing/ the ceremony were each presented/ with a coin with a hole in it, in which/ was fastened a tie of ribbon and all/ were invited to the house of the pa-/rents, where wine and sweet cake/ (made of corn) were put upon the ta-/ ble. Those acting as god father and/ god mother to a child enter into a/ sort of relationship with the real pa-/rents, that is expressed by the terms/ compadre and comadre words that/ are used as commonly in this country/ and Brazil, as mister and mistress in/ the United States. If a man is blessed/ with a large family, he can call half/ the village compadre and comadre, as/ a new couple are generally chosen for/ each child. This custom or ceremony/ seems to have a great influence in/ making and cementing friendship be-/tween families and it might be well if/ we had some such practice among us./ Since I came here I have seen for/ the first time the "Victoria regia⁸¹,"/ growing through it is also found upon/ the lower Amazon. It is found here/ in a lagoon near the mouth of the Am-/byacu where half an acre is so closely/ covered by the great leaves that they/ crowd upon one another. The full/ grown leaves are from four to five/ feet in diameter, the size of a large/ umbrella. They are light green above/ but dark purple below with large deep/ leaf veins that are thickly covered/ with long sharp spines. Each leaf is/

mandicoa [sic; mandioca] which lacks/ the poison-

ing juice of that made into/ farniha [sic; farinha], is

much used here boiled, and/ makes a good substitute

for bread and/ potatoes. A few days ago a priest/ who

serves several villages down the/ the [sic] river near

here, came up in a canoe/ and there were several chris-

tenings,/ for though marriage is considered su-/per-

fluous, christening is one of the ne-/cessities. Most of

the children chris-/tened were those of the Indians,

and/ here was a great gathering of them,/ and much

bell ringing and a few can-/dles burned at the ceremo-

ny, but there/ was a white child to be christened,/ and

this was an affair of greater mo-/ment. A god father

and god mother/ had been chosen for it and it was/

given over to their hands and carried/ by them to the

church. Most of the/ white people of Pebas went and

I fol-/lowed. The friends all stood around/ with wax

candles in their hands while/ the child in the arms of

its god moth-/er was salted and oiled by the priest/

who blessed its eyes, and ears, and/ nose and mouth

in Latin, a boy stand-/ing by with the boxes of oil

⁸⁰ For the Indian tribes mentioned by Steere in the ensuing letters see Raimondt & Bollaert, 1863.

⁸¹ Victoria amazonica (Nymphaeaceae).

turned up at the edges to a height of/ three or four inches so that it looks/ like a great shallow disk. The plant/ is call [sic] by the Brazilians 'furno' [forno] from the resemblance of the leaves to the/ great earthen dishes they use in/roasting farniha [sic; farinha]. There are but a/ few of the flowers in blossom at this/ season but enough to show their size/ and color. They are nearly a foot in/ diameter when fully open, but like/ our pond lillies [sic] close during the mid-/dle of the day. The first time they/ open they are pure white and look/ like over grown pond lilies, but the/ second day they show a rosy or pur-/ple tinge which deepens until the/ flower decays. The sepals and the/ flower stalk are covered like the leaves/ with spines and the whole plant is dif-/ficult to handle. I cut one of the/ leaves into pieces twelve by sixteen/ inches the size of my drying papers/ and tried to press it, but the damp/ weather and the spongy nature of the/ leaf have been too much to over/ come./

Since I have been here the village/ has been visited almost nightly by a/ large tiger or ounce who is in the/ habit of dashing into the yard of one/ of the villagers and catching a dog/ by the neck, perhaps from the very/ door steps, and making off with it to/ the woods. I have been waked up/ several times by the rush and last/ howl of some poor dog, but before we/ can get out with our guns he is al-/ways safe in the woods where not a/ dog in the village dare follow him./ A few days ago an Indian girl who/ had climbed into a fruit tree just back/ of the house happening to look down/ saw him watching her, but she drop-/ped down with a scream that fright-/ened him so much that he ran into the/ woods again. He has already eaten/ a dozen dogs but has left the calves/ and pigs that are running about the/ village untouched./

J. B. STEERE

Letter XXXVIII
[Peninsular Courier and Family Visitant, 11(20),
May 17, 1872]

FOREIGN CORRESPONDENCE

Number XXXVIII

YURIMAGUAS, PERU, February 25 [sic, 15th], 1872.

The steamer makes but monthly/ trips, and I concluded to come on to/ this place instead of stopping a month/ at Yquitos [Iquitos], contenting myself with/ the four days that the steamer lies/ there on its

way up. Our trip to/ Tyuitos [sic; Iquitos] was without incident. The/ first night we ran into the mouth of/ the Napo and anchored there, and/ next day, just at night, arrived at/ Tyuitos [sic; Iquitos]. It is built upon a bank of/ red clay that rises forty or fifty feet/ above the river, below this red clay/ the coal and fossils of Pebas again/ cropping out. This place, ten years ago, was an Indian village of two or three/ hundred inhabitants, but in 1864 the/ Peruvian government established its/ factories here, and a line of steamers,/ perhaps the better to confirm its right/ to these territories, which is disputed/ by Equator [Ecuador], while there is also some/ dispute yet with Brazil, who, if the/ Spanish Americans can be believed,/ has been encroaching on all her/ neighbors. The place is regularly/ laid out, and the streets have lamps/ and some of them sidewalks, luxuries/ that I have not seen since I left Man-/aos. Some of the houses are covered/ and floored with tiles and a small/ brick block of one story is building/ for the government officers. There/ are perhaps sixty English workmen,/ with Peruvian officials, tradesmen and/ Indians that bring the population up/ to about two thousand. The govern-/ment factories were built to keep in/ repair the steamers required to navi-/gate the Peruvian Amazon and its/ branches. They comprised a foundry,/ steam saw mill, blacksmith and car-/penter shops, and a tile and brick/ factory. They are all supplied with/ English workmen, who are assisted by/ Peruvian apprentices and Indians, / ad libitum. These Indians are sup-/plied from the towns about, by a/ species of draft, and serve two/ months, and are then supplied by/ others before they have learned to be/ of much use. I saw a dozen of them/ trying to move a saw-log that could/ have been easily put in place by three/ or four Michigan lumbermen, and it/ took them an hour to move it three/ feet. The machinery and saws are/ are [sic] all English and did not seem to be as/ well fitted for the business as our own./ There has been great complaint of/ insufficiency in some departments/ there, but they have certainly built up/ a stirring place, where a few years ago/ there was a dull Indian village. In/ the foundry they have cast bells and/ even a brass cannon. There were/ four steamers lying there beside the/ Morona upon which I came up: but/ all, or nearly all, under repairs. The/ place wears an air of business that/ only the presence of the foreign/ workmen could give it. A lodge of/ free masons is flourishing and has/ among its members nearly all the/ Peruvian officials, in spite of the Catho-/licism. There are two or three bil-/liard rooms and in all the towns of/ the Amazon every place of business is/ a liquor store, where one can get/ drunk to suit his tast [sic], or his pocket./ A library and liter-

ary society was es-/tablished, but did not thrive in the/ atmosphere of the place and has been/ abandoned. The influence of the/ place upon the English workman is/ acknowledged by all to be bad, but/ there are various reasons given, some/ blaming the climate and others the/ lack of society and the restraining in-/fluences of home, but whatever the reason they seem to go to the bad/ pretty fast, the most of them going/ home broken down physically and/ morally, and without means, or dying/ here of delirium tremens or other di-/seases brought on by drink. They get from fifty to one hundred dollars/ per month with passage paid, and many/ short hours of work, but as in Eng-/land, with poor pay and long days of/ labor they spend their spare money/ and time in drinking and lounging/ about the beer shops; so they do here/ but with more money they are able to/ buy wines and brandy. At home/ with beer they seem able to live on to/ a pretty good old age and die in the/ poor house, but the stronger drink/ here kills them sooner, and with less/ cost to the State. Many of them also/ follow the custom of the country of/ living without marriage with the In-/dian and half breed women, claiming/ that it is the only way they can get/ their washing and cooking done, and/ that it thus becomes necessary./

It seems as if this would be a good/ place for missionary work – not by an/ English missionary, that has been ac-/customed to moderate drinking at/ home and does not know where to/ draw the line, but for a real Ameri-/can missionary and tetotaler [sic]. Many/ of the Peruvian officers speak Eng-/lish, and would listen to Protestant/ preaching, while the priests of/ the country, by their immoral/ lives, have lost what influence/ they might have against such a work,/ and a good counsel and example of/ a Christian minister would have more/ influence, from the comparison with/ their's [sic]. There are certainly a few/ there who would welcome a Protes-/tant minister, and would do what they/ could to assist him./

I found there three [sic] American en-/gaged under the Peruvian Hydro-/graphic Commission⁸², in surveying the/ upper branches of the Ama-

United States navy. Tucker was undoubtedly a celebrity. Born in Alexandria, Virginia, on January 31, 1812, after attending private schools in Alexandria, he entered the U. S. Navy as a midshipman on June 1, 1826 and had service afloat in the Mediterranean and Brazil squadrons prior to his promotion to Lieutenant on December 20, 1837. He married Virginia Webb on June 7, 1838 (she died in 1858). During the Mexican-American war he served as a Lieutenant Commander in the Gulf of Mexico, commandig the USS Stromboli until illness forced him to return north. From 1849 until 1855 he was assigned to the Home and Mediterranean Squadrons' flagship. Tucker received his commission as Commander on September 14, 1855, when he became commanding officer of the USS Pennsylvania. He later served as Ordnance Officer at the Norfolk Navy Yard. Tucker resigned from the U. S. Navy when Virginia seceded from the Union in April, 1861, becoming a Commander in the Virginia Navy, and, in June, the Confederate States Navy. He was commanding officer of the CSS Patrick Henry during 1861-1861, participating with her in several combat actions. During the Federal Navy's attack on the Drewry Bluff fortifications in May, he commanded one of the defending batteries. In July, 1862, Tucker was ordered to Charleston, South Carolina, where he took command of the ironclad CSS Chicora. The following January 31, he led his ship in a successful attack on Union warships off that port. He became commander of the Confederate warships at Charleston in March, 1863, remaining in that post until the city fell in February, 1865. During that time, he was promoted to Captain and aggressively pursued spar-torpedo warfare against U. S. warships. During the U. S. Civil's War last weeks he served in the defenses of Richmond, Virginia, and with the Confederate States Army withdrew to its final destiny at Appomattox, Virginia. He surrendered in the field on April 6, 1865, at the Battle of Sayler's Creek, and remained a prisoner of war until July 24. After his release, he returned to the South to work as an agent of the Southern Express Company of Raleigh, North Carolina. In 1866, having accepted the Peruvian Government invitation, he went to Peru with Captain David Porter McCorckle and Commander Raleigh Butt. Although some Peruvian Naval Officers objected to a foreigner in command of their fleet, Tucker distinguished himself in battle with Spain. Tucker resigned from the Peruvian Navy in 1871. He was then appointed president of the Peruvian Hydrographical Commission of the Amazon, which surveyed the upper Amazon River and its tributaries. This expedition discovered two new rivers, the Trinidad and the Herrera-Yacu. Tucker traveled to New York upon completion of the expedition to have maps and atlases made from the Commission's findings. He died at Petersburg, Virginia, on June 12, 1883. His collected papers are in the library of Old Dominion University, Norfolk, Virginia. In 1871, as senior member of the Hydrographic Commission of the Amazon was named Lieutenant James Henry Rochelle. He was born in Jerusalem (now Courtland), Virginia, on November 1, 1826. He graduated from the Naval Academy in Annapolis in 1848, and then served with Commodore Perry in Japan. Following the outbreak of the Civil War, he resigned his commission in the U. S. Navy, serving first as lieutenant and eventually as a commander. Following the Civil War, Rochelle joined his long-time commander and friend Admiral John Randolph Tucker in surveying the upper reaches of the Amazon river for the Peruvian Navy. Before his death, Rochelle wrote a biography of Admiral Tucker (published in 1903). He died at his home on March 3, 1889. In Rochelle & Tucker's 1875 paper ("Report of the Hydrographic Commission of Peru on the Amazon River"), we find some of the names mentioned

⁸² Peruvian Hydrographic Commission – In 1866 Peru and Chile were at war with Spain. To contract a foreign official to command the allied fleet was an option foreseen in the Peruvian-Chilian alliance, and the government of Peru instructed its ambassador in Washington, Federico Barreda, to seek a very competent naval officer for the task. No officer of the United States navy accepted the offer, and Barreda's alternative was to contact Confederate officers. Two candidates were selected, John Randophl Tucker (Werlich, 1990) and Robert B. Pergram. Tucker was chosen. He would receive the degree of Rear Admiral of the Peruvian navy, with an annual salary of US\$5,000, the same amount paid by the

zon, one/ of their principal objects being to/ find a navigable route to some point/ from which a wagon road or a rail-/road can be built to the coast; the/ only communication now being by/ foot paths across the mountains – bag-/gage and freight being carried on/ men's shoulders./

They were all formerly officers of/ the Confederate navy. Captain Butt/ was a lieutenant of the Merrimae,/ Dr. Galt the surgeon of the Alabama,/ while Captain Rochelle held some/ command in the harbor of Charles-/ton; but for all this, I found them re-/joicing over the defeat of Tammany,/ the news of which had just reached/ them, and otherwise conducting them-/selves like good loyal Americans./ One of them remarked that at such a/ distance from home political differ-/ences fade out, so that all can see how/ great and good our country is com-/pared with such an abomination as/ this. If the leading politicians of our/ country, of all sects and sections,/ could be shipped to this country and/ kept here for six months, and then/ sent home, there would be a "new/ departure" all round, and that for/ the better./

Dr. Galt has been making very/ close observations with the barometer/ and thermometer for the last year,/ and has also observed the winds, storms, rain fall, etc., and he was kind/ enough to present me with an abstract/ of the results, while Captain Rochelle/ copied for me the observations of latitude and longitude made by the/ commission at many places, before/ undetermined. Captain Butt con-/tented himself with running about/ town to find me a room, and to pro-/cure letters of introduction to aid me/ on my trip across the mountains./ Colonel Sepeda, a Brazilian merchant,/ to whom I had letters from Para, and/ Captain Smith, a Peruvian, and owner/ of a little trading steamer - the "Ce-/cilia," also treated me with great/ kindness. After four days busily/ spent in packing my collections made/ at Pebas, I bade farewell to my new/ made friends, and started again up/ the river with the conviction that it/ would be hard to find more loyal or/ warm hearted American than those/ in Yquitos [Iquitos]./

On our trip to Turimaquas [sic; Yurimaguas] we had/ the Commandent-General [sic], the chief/ offi-

by Steere: "The steamers *Mairo* and *Tambo* for exploring purposes being placed under the orders of the commissioners, along with the first assistant, Mr. J. H. Rochelle; the surgeon, Francis L. Galt; the engineer, J. W. Sparrow, and the secretary, L. M. Nesnier, we embarked on board of the *Tambo*, with the chronometer and other instruments. The second assistant, Mr. W. R. Butt, and the vicil engineer, Nelson B. Noland, went on board of the *Mairo* with the instruments necessary for the task intrusted to them...".

cer of this harbor of Peru, on/board, and he brought with him his/ military band and most of the offi-/cials, as the steamer was expected to/ go to Borja, upon the upper Maranon [Marañón],/ during the trip. We always had/ music at dinner and supper, and/ among the pieces frequently played/ were "Shoo Fly," and "Johnny Fill Up the Bowl". We had a priest on/ board, and the second day of the/ voyage we all went on shore at one/ of the little cane and palm leaf vil-/lages, to consecrate or christen a little/ palm church. The Peruvian officers/ held the wax tapers during the cere-/mony and had considerable sport in/ dropping the melted wax on each/ other's coats, and others were con-/ducting themselves unceremoniously,/ while the poor Indians were kneeling/ reverently and looking on, thinking/ perhaps that this was a proper part of/ the performance. After the church/ was consecrated the priest celebrated/ mass, and during this the band played/ "Hail Columbia".

The towns from Yquitos [Iquitos] to this/ place are a succession of Indian vil-/lages. Nanta [sic; Nauta], at the mouth of the/ Ucayali is the largest, and has con-/siderable trade./

The Amazon, that has kept a/ breadth of nearly a mile from Taba-/tinga up, rapidly narrows above the/ mouth of the Ucayali, which is a/ larger stream than the one honored/ with the name of Maranon [Marañón] or/ Amazon. The country is all very/ low, and about the mouth of the/ Huallaga there are the same low/ swamps of asai [sic; açaí] and miriti palms,/ found about the island of Marajo [Marajó], and/ at the mouth of the ten counties, two/ thousand miles below. We ran/ around at the mouth of the Huallaga/ and lay there a day, and then steamed/ up to this place, where we arrived/ after a voyage of six days, the steamer/ running only during the day. The/ weather is much cooler here and the/ water seems cold, and the mountains/ are said to be in sight in clear weather,/ though I have not yet seen them. I/ shall go to Borja in the steamer, and/ then come down in canoe, and wait for the/ steamer to again bring me to this place/ next month./

J. B. STEERE

Letter XXXIX [Peninsular Courier and Family Visitant, 11(22), May 31, 1872]

FOREIGN CORRESPONDENCE

Number XXXIX

BORJA, PERU, February 20, 1872.

The Commandent-General [sic], and/ nearly all the company that came/ with him from Yquitos [Iquitos], kept on to/ Borja, and we had music as before as/ we steamed down the Hualloga [sic; Huallaga], and/ again turned up stream in the Mara-/non [Marañón] or Amazon, now hardly deserving/ the name, having dwindled from its/ sea-like appearance, in its lower/ course, to a river of fifty or sixty/ yards in width. We now saw proofs/ of the vicinity of rocks and moun-/tains, in the beaches of coarse gravel/ and the swift current, that almost de-/served the name of rapids in some/ places. On the second day the cap-/tains pointed out what appeared to be/ a low bank of blue clouds in the west,/ and told me it was the moun-/tains. After so many months voyag-/ing in the lower country, where the/ river had seemed almost supreme,/ flowing between low jungly banks/ formed by its sediment and covered/ by it during high water, it was pleas-/ant enough to see these peaks that/ had never submitted to its power./ They were foot-hills of the great/ Andes range, apparently fifteen hun-/dred or two thousand feet above the level of the river, and running from/ north-east to south-west. All day, as/ the wind would drive the clouds from/ before them, we could see them ris-/ing higher and higher, and just after/ dark we came to anchor before Borja,/ lying just at their feet. The current/ was so strong that the steamer/ dragged her anchor, and we had to/ run up again; but the second time/ we were more fortunate, and lay se-/cure till morning. Daylight showed/ us the river rushing through between/ two of the hills with great force,/ huge boulders of white limestone/ being piled up along its banks like/ walls. Borja is built on the north/ side of the river, on low lands just at/ the foot of the hill. There is said to/ have been a large town and mission/ of Christian Indians here at the time/ of Spanish rule, but they were at-/tacked by the wild Indians, who fired/ their palm leaf roofs, and killed most/ of the inhabitants as they tried to/ escape, the survivors going down the/ river and settling in safer places. The/ place was then deserted until three or/ four years ago, when four Italians set-/tled here to dig gold, and had pro-/cured several of the Huambises⁸³, a/ wild tribe living upon the river San-/tiago, to help them. One day these/ Indians told them of better diggings/ above the rapids, and while they were/ on their way to find them, murdered/ them, cut off their heads to preserve/ after the curious custom of their/

tribe, and then came home in triumph./ The Peruvian government then es-/tablished a military station here to/ protect settlers; but there is only one/ such now in the county - an old Aus-/tralian, who is engaged in raising/ plantains and potatoes for the garri-/son. The town now consists of the/ barracks of the twenty soldiers, the/ officer's residence and the store room,/ these surrounding three sides of the/ little square or plaza, the fourth being/ open to the river, and guarded by/ three little cannon under palm leaf/ sheds. Besides these there are a few/ huts belong [sic] to the soldiers' women,/ all being covered with palm leaves/ and built of canes, so that they would/ burn up again in ten minutes. The/ place is commanded by a lieutenant-/colonel, a captain, and two lieuten-/ants, one of whom to my satisfaction,/ spoke English. Commandante Ray-/gado, of the steamer Morona, pro-/cured me quarters with the officers,/ and with the help of Lieutenant/ Viera, the English speaking one, I/ soon had my baggage on shore, as/ the steamer was to leave directly./ Then the plank was drawn in and the/ sailors tried to heave up the anchor,/ when they found that both vessel and/ anchor were fast on the rocks, the/ river having fallen during the night./ After watching until I was tired,/ while the paddles pounded the water/ into foam and the men heaved at the/ windlass without stirring the vessel/ an inch, I took my gun and went to/ the woods. Two or three hours after-/ wards, when I returned, everything/ was in confusion, and three boats/ were being manned and sent up the/ river as quickly as possible. The/ captain, finding the steamer fast, had/ taken a boat and most of the officers/ and passengers, and had gone up the/ river to see the Pongo [de] Manseriche⁸⁴, as/ the gap is called where the river/ breaks through the hills. A few min-/ utes before, three Indians of the crew/ were picked up while floating in the/ middle of the river upon a piece of/ timber. They reported that the boat/ had been wrecked and some of the/ people had been drowned. The three/ boats seemed an age in pulling the/ half mile to the bend in the river,/ just behind which were the rapids,/ and then we watched another hour/ before we saw the boats one after/ another, shoot around the point and/ come down with the current. When/ they came alongside, the wrecked/ men climbed to the deck so exhausted/ that they could hardly stand, and/ with clothes dripping and torn in/ shreds, showing how hard had been/ their battle for life. They

³ Huambises – Huambisa, Jíbaro linguistic family, selfdenominated Huampis or Shuar, a tribe from Peru (departaments of Loreto and Amazonas, at the rivers Morona and Santiago).

⁸⁴ Pongo de Manseriche (Quichua: Mansirichi ("the one who frightens"), punku ("door")); located at 4°27'30"S, 77°34'51"W, just below the mouth of Río Santiago, and between it and the old missionary station of Borja. See Carvajal & Portillo, 1904

were all/ safe but two – the chief engineer and/ his mate had gone down with the/ boat. They had just reached the/ narrowest point, where the river is/ said to rush between high walls of/ rock, less than a hundred feet apart,/ when the boat filled and sank in an/ eddy. They were but a few rods/ from shore and were all stong [sic; strong] swim-/mers, but some of those who were/ saved were drawn under several times./ Mr. Tylle, the chief engineer, was/ English, and had a wife and several/ children at Yquitos [Iquitos], who are left in/ this far off place without a friend./ The other engineer was Peruvian,/ and also leaves a family./

The Pongo is passed safely in/ canoes during the summer when the/ water is low, but this must forever be/ the head of navigation for steamers/ upon the Maranon [Marañón], though some one/ has suggested that the rocks in the/ bed of the river may be blasted so/ as to make it passable.

After another day's stay the water/ rose, and the steamer went down the/ river, leaving me here to try a sol-/dier's life for a few days./

I have found a few fossils in the/ limestone that lies in great blocks/ along the river, and fills the ground/ where the village stands, and have/ spent several days in climbing over/ the hills in search of game, but one/ can pass hours in the woods without/ seeing a bird; perhaps they have/ gone across the mountains to a drier/ climate. The climate here, but for/ the frequent rains, is delightful, being/ so cool that the soldiers and officers/ wear woolen clothing, and sleep under/ blankets. There are very few mus-/quitoes [sic], but their absence is some-/what atoned for by the multitude of/ Jiggers⁸⁵, with which Lieutenant Viera/ is limping about in slippers, and the/ dogs of the village go about the square limping on all four. I thought/ at first, that I was going to escape/ them, but find that I have several/ flourishing clumps of them in my feet./ The first intimation one has of this/ pestilence is a painful itching and/ stinging in the feet, when small round/ white spots can be seen under the/ skin; upon carefully cutting about/ these, a little sack made of something/ resembling spider's web, and full of/ eggs can be lifted out. This is some-/times as large as a flea, and, by its/ growth has crowded apart the fibers/ of flesh without making a real wound./ This removed is generally all that is/ necessary for a cure, though if the/ sack is broken so as to leave some of/ the eggs in the flesh, the consequences/ are said to be bad./

The soldiers here are without shoes,/ and dressed in all sorts of odds and/ ends of uniform, but they are

armed/ with American breech-loading rifles -/ Spencer's patent - and if they know/ how to use them, might withstand an/ attack from all the Indians this side of/ the Andes. They look yellow and/ jaundiced, and one poor fellow has/ died since I came, but the officers say/ they kill themselves eating clay, char-/coal, rotten wood, etc86. Their princi-/pal food is dried fish and green plan-/tains, both shipped from Laguras [sic; Lagunas] and/other places below, and generally/ much the worse for the voyage./These are helped out with a plentiful/ allowance of cachaca [sic; cachaca], and the quality/ of their food may be the cause of this/ strange appetite. They might be the/ better, both by the work and the fare,/ if they were set to cultivate gardens./ For the first time, in South America,/ I find here the common potato grow-/ing. The vines are but a few inches/ in height, and the potatoes hardly run/ as large as eggs, but of good quality./ The whole country below is supplied with potatoes from Portugal, that sell/ in Yquitos [Iquitos] for twenty cents a pound./

Life here is a round of mounting/ guard, roll call, and lying around the/ barracks, and mine is fast getting to/ be as monotonous as that of the rest./ As soon as I can get a canoe I shall/ go down the river./

J. B. STEERE

Letter XLI [Peninsular Courier and Family Visitant, 11(14), June 14, 1872]

FOREIGN CORRESPONDENCE

Number XLI

LAGUNAS, PERU, March 1st, 1872.

⁸⁵ Jigger – Tunga penetrans (Linnseus, 1858) (Siphonaptera, Pulicidae).

⁸⁶ This refers to ancylostomiasis, an infection of one of two different, 7 to 13 mm roundworms called hookworms (Ancylostoma duodenale or Necator americanus). Hookworm eggs are passed in stool and infection results when a person comes in contact with the eggs from the contaminated soil or stool. The larvae enter through the skin and travel to the lungs through the blood. They climb up the lungs through the bronchi and trachea and then are swallowed. As the larvae pass into the digestive tract they attach themselves to the wall of the small intestine. The mouth of the hookworms present cutting plates (Necator) or curved teeth (Ancylostoma) which perforate the intestine, causing blood and iron losses, leaving the individual anemic. Here they mature into adult worms, mate and feed on the blood of the host. Adult hookworms may live up to ten years. Individuals infested by hookworms present the typical phenomenon of geophagy, the practice of eating earthy substances (such as clay), often to augment the mineral-deficicient diet.

Barrancas is a village of twenty/ Pabu [sic; palm] thatched huts, built on the bank/ of the Maranon [Marañón], and upon a bluff of/ prettily colored red sand and clay/ that gives it is name. This bluff is/ eighty or a hundred feet high, and is/ continually cut away at the base by/ the river so that great pieces are fall-/ing in, leaving the banks nearly per-/pendicular. The Commandante of/ Borja, who arrived a few days before/ me, took me into the house he was/ occupying, where I hung my ham-/mock and was at home. The Com-/mandante had been to a village below, where there were a couple of little/ Indian girls captured from the Ayor-/unas [Aguaruna]87, a wild tribe living upon the/ river Pastassa [sic; Pastaza], and had taken them/ with a strong hand, their captors, the/ Christian Indians, not wishing to/ give them up. He was going to send/ them to Lima, according to the pro-/vision of the government for the edu-/cation and adoption of such captives./ He was feeding them well, and they/ seemed pleased with their new mas-/ter. At night he took them to sleep/ with him in his mosquitoe [sic] bar; but/ after he was asleep they crawled out,/ and going to the river and finding a/ canoe and paddles, they pushed off/ and were gone. The Commandante,/ soon after waking up and finding his/ prizes gone, called out his soldiers/ and had the town searched, and find-/ing a canoe gone sent soldiers in pur-/suit at midnight. The next day they/ returned at dark without success - two/ little Indian girls, one of eight and/ the other ten years, had proved more/ than a match for the Commandante and/ his soldiers./

The next day I spent in hunting/ with little success, and prepared for/ an early start down the river the next/ morning. I hired men for Aripari,/ a village two hours distance below,/ but found on starting that I had an/ old man, and two boysof [sic] ten years of/ age, but the little fellows pulled like/ men and we were soon there. At/ Aripari I hired men for Cedro Isla,/ near the mouth of the Huallaga, and/ passed on after an hour's delay. / About noon we passed San Antonio, / near the mouth of the Pastassa [sic; Pastaza],/ which has been quite a town, and has/ perhaps thirty-five or forty houses,/ but the inhabitants have left for fear/ of the Ayorunas [Aguarunas], of the Pastassa [sic; Pastaza],/ who have proved troublesome lately,/ and are said to have sacked and/ burned one town of Christian Indi-/ans on that river./

Just at night we saw a canoe drawn/ up to the beach and a couple of men/ stooping over a fire, and paddled/ towards them, but as we approached/ they began to grow uneasy, and one/ ran and got his spear which was near/ the boat, and the other drew his knife./ They were a wild looking couple, and/ I did not know but they were/ Ayorunas [Aguarunas] and we should have a fight,/ but they proved to be Christian Indi-/ans with the same suspicions of us./ I bought the man's spear, and after/ roasting some fish and plantains at/ their fire we pushed out and went on./ After night the men began to get/ sleepy, and would paddle a few min-/utes and then doze, while the canoe/ would swing round with the current/ and go down stream stern foremost./ My position was too cramped to/ sleep, if the mosquitoes had allowed,/ and thus we drifted on till about mid-/night, when the men pointed to the/ shore and said Cherui, and I made/ them understand that I wished to go/ ashore there. We found a feast in/ progress, and all who could speak/ Spanish drunk or asleep. For lack/ of a better place, I hung my ham-/mock and mosquito bar in an open/ tambo orchard among several sick/ puppies, and slept as well as the/ barking of the dogs and the noise of/ the feast would allow./

In the morning the governor/ or lieutenant, a half-breed, and more/ than half drunk, made many apol-/ogies for not receiving me the night/ before, claiming to have been asleep/ rather than drunk. He wished to go/ with me to Cedro Isla, and we/ started in a rain storm as I was in a/hurry for fear of missing the steamer./ A large wooden shield of the Huam-/bises [Huambisa], that I had bought above, served/ a good purpose as an umbrella. We/ arrived at Cedro Isla before night,/ where I was glad to get rid of my/ friend, the Governor of Cherui, who/ had made himself very familiar during/ the trip on the strength of his being/ a "Castillano." Upon my arrival at/ Cedro Isla, I immediately engaged/ men for trip to Lagunas, paying into/ the hands of the Governor forty/ cents each for three men, and as/ much more for a canoe. The Gov-/ernor paid this over to the koraka [sic; curaca],/ who went about among the young/ men offering them the money much/ like a constable summoning witnesses,/ the ones accepting being bound to/ go. After this was arranged, and my/ baggage safely in the house of the/ Governor, a quiet young Peruvian,/ I went out out to examine the place,/ which consists of four or five houses/ scattered along the beach and backed/ by large plantations of plantains./ Under a large shed near the house of/ the Governor, was a primitive dis-/ tillery for making aquardente [sic; aguardiente] from/ plantains. The ripe plantains were/ boiled in a great

⁸⁷ Ayorunas – Aguaruna (Jíbaro linguistic family), self-denominated Aents. Departaments of Amazonas, Cajamarca, Loreto and San Martín, at the rivers Marañón, Cenepa, Chinchipe, Nieva, Mayo, Apaya, Potro and lower Santiago.

earthen pot until/ they made a sort of syrup, which was/ stored in a canoe and covered with/ plaintain leaves until it fermented suf-/ficiently, when it was dipped into/ another very deep pot. Near the/ top of this a hole was made for a/ hollow cane, and in the top a kettle/ of cold water set. All the crevices/ were then stopped with a paste made/ from the boiled plantains, and a fire/ built up below, and there was soon a/ little stream of the precious spirits trick-ling down the cane. It was very weak,/ not having more than ten or twelve/ per cent of spirit, but it served to get/ drunk upon. The Indians were all/ half drunk, and likely kept so as long/ as the distilling lasted. I could hear/ them about the pier nearly all night,/ and had some trouble in getting them/ together in the morning. But we/ finally got off, and after a couple of/ hours floating down the Maranon we/ turned a sharp corner, and began/ pulling up against the strong current/ of the Huallaga, crossing the river/ now and then to escape those places/ where the current ran strongest./ Those who descend can take the/ strong current in the center, but those/ who go up stream must keep near/ shore where the force of the current/ is broken. The Brazilian Indians/ have a saying that "Embacho tudos/ os Santos ajudam, mais ersema ne/ um. [sic; Para baixo todos os santos ajudam, mas para cima nenhum]" - going down stream all the saints assist but going up not one. - / A large monkey that I had bought/ on the Maranon was tied in the bow/ of the canoe and was continually/ catching at the limbs of the trees/ overhanging, or was bowing and pos-/turing to the motion of the boat,/ greatly to the amusement of the In-/dians./

The Governor told me that we/ should reach Lagunas before dark,/ but night came and we still moved/ on. About midnight we stopped at/ a port where there was a large path/ but no houses, and from the notions of/ the men I concluded we must be at/ one of the ports of Langunas [sic; Lagunas], but they/ could only speak Inca and did not/ seem inclined to carry my baggage to/ the town, so I hung up my musquito [sic]/ bar on shore and left them talking in/ the canoe, though I had some miss-/givings [sic] lest they should run off dur-/ing the night with my baggage./ When morning came, the canoe and/ men were gone but they had spread my baggage along the beach, tying/ the monkey to a stake. I had, now,/ to leave my things thus and walk to/ town. I did not know how far it was/ but found it after two miles walk./ The Governor proved to be a man/ with whom I had become acquainted/ on the steamer, and he sent Indians/ to bring my baggage to his house,/ where I was soon in good quarters./

Lagunas is a town of ten or twelve/ hundred inhabitants of the tribe of/ Cocamillas88, who speak the same lan-/guage as the Cocamas of Nauta./ There is said to have been a mission/ of several thousand Indians of four/ different tribes here formerly, but/ when the Jesuits were expelled, the/ tribes separated leaving only the Co-/camillas here. The country about/ here is level, with many small prairies/ or campos. It is but a few feet/ above the leve of high water, but/ seems to be rich and well suited for/ settlement, much better than any/ place I saw in Brazil, from being/ cooler and freer from musquitoes [sic] and/ other pests, though there are plenty/ seen here, and better than the lands/ about Pebas, Nauta and Yquitos [Iquitos],/ which are too much broken and cut/ up with ravines, to make farming with/ the plow pleasant./

Here are the first good cattle I have/ seen since I left the United States;/ great fat cows as large as two or/ three of the Marajo [Marajó] cattle. They are/ worth one hundred dollars apiece/ though their raising costs nothing./ The governor reports a large body of/ this level land, and it will likely some/ day be the seat of thriving colonies/ from Europe./

J. B. STEERE.

Letter XXXX [Peninsular Courier and Family Visitant, 11(23), June 7, 1872]

FOREIGN CORRESPONDENCE

Number XXXX

BARRAUCAS [sic; Barrancas], PERU, February 25, 1872.

The commandante of the station/ had gone below in one canoe, and the/ other had been lost in the rapids, so/ that when I got ready to go down/ the river the soldiers were sent to the/ monte to cut timber for a raft, a/ means of conveyance much in use on/ the upper rivers. The wood used is/ called – palo da balsa [sic] – raft wood, and/ is almost as light as cork, for which/ it is often used. They cut fine sticks/ fifty feet long, and about six inches in/ diameter and lashed them together/ with vines, and then made a little/ raised platform for me and my goods/ in the center. They then braided to-/gether four palm leaves

⁸⁸ *Cocamas, Cocamillas* – Tupi-Guarani linguistic family. Departament of Loreto, rivers Huallaga, lower Marañón, lower and higher Ucayali, Amazonas, lower Nanay.

for a shelter,/ and, all embarked, two soldiers with/ me to direct the raft. When we/ pushed off from the shore the raft/ sunk under the water, all but the lit-/tle perch, and altogether it had a very/ insecure look and feeling, but we/ worked our way into the middle of/ the river and went floating down/ with the current, the soldiers being/ seated in front upon a box, with their/ bare feet in the water. The raft was/ so deep in the water, and so unwiel-/dy that the men could not manage it;/ no very pleasant situation with the/ river full of sunken timber, that stuck/ up in "snags" and "sawyers", over/ which the water was often dashing/ to a height of five or six feet. We/ could hear the water roaring as it/ dashed over the sunken timber, be-/fore we could see it and then the sol-/diers would watch, and, as soon as/ they saw the snags they would try to/ pull the raft away from them, but we/ were almost as apt to pass on the/ wrong as the right side. If we had/ struck fairly upon one of them the/ consequences might have been serious/ but after passing many of them with/ but a few grazes I began to breathe/ freer, and could spend some time in/ examining the country we were pass-/ing through./

The river here, so near its sources/ in the mountains, has lost that grad-/ual rise and fall that is so marked in/ Brazil, where for six months it rises,/ and then falls during the rest of the/ year; it rising here for a few hours/ or days, and then falling again, the/ only difference between the rainy and/ dry season being the frequency and/ extent of its changes, as this season/ even, there are generally broad/ beaches or plaias [sic; playas] in sight, and the/ gradual and regular decrease in the/ size of the stones that cover them is/ very curious. At Borja these are/ great irregular blocks or boulders of/ limestone, just torn from their bed,/ a few miles below they are worn and/rounded stones, as large as bushel/ measures, then as large as one's head,/ and before one reaches Simon [sic; Limón], the/ first settlement below Borja, the lime-/stone is all worn to mud, leaving/ nothing but the few granite pebbles./ This change in size is so uniform that/ the stones on the different pleias [sic; playas] ap-/pear to have been assorted and sized./

As night came, we floated on by/ moon light, now being close to shore,/ so that if we should get wrecked we/ could make our way to land. Soon/ after night the woods are echoing/ to the notes of a strange bird that I/ have heard at night the whole length/ of the river, first noticing them at the/ island of Caciana [sic; Caviana]. It seemed to an-/swer to the description given by/ travelers of the "spirit bird," but I/ have been unable to find a name given/ it in Brazil. Upon inquiring its name/ of the soldiers they said it was

called/ Yaya, mama! Which means in the In-/dian language, father, mother! And/ upon asking why it had this strange/ name, they gave me this little story./ A young hunter married a beautiful/ girl, and soon after went a great dis-/tance into the mountains to hunt./ During his long absence, she was/ false to him and bore a child, of which/ he was not the father. Upon his re-/turn, to conceal her guilt, she carried/ the child into the forest, and left it/ there, and it is this lost child that/ wanders through the woods calling/ Yaya, mama! The cry of this bird is/ very human, but rather a cry of utter/ loneliness and despair than a cry for/ help, being well represented by the/ syllables, Oh-ho-ho-ho. The first al-/most a shriek, and running down to a/ sigh with the last./

We had intended to drift on all/ night, but the soldiers were afraid to/ go father, so we drew up about nine/ o'clock, at a smooth beach, when the/ men went on shore to sleep, while I/ tried the raft; but the musquitoes [sic]/ were in clouds, and I soon followed to/ the shore, where the palm leaves that/ had served from the sun/ during the day, with my musquitoe [sic]/ net hung over them made a good bed,/ when I listened to the singing of the/ spirit birds and musquitoes [sic] until I fell/ asleep and dreamed of more pleasant/ music. In the morning we ate our/ rations of cold boiled yuccas and fish,/ and were floating on by the sun rise. As/ we passed the mouth of a lagune, a/ tapir that was drinking at the bank/ became frightened at us and plunged/ in and swam across, and went into/ the bushes. If we had a canoe/ we might have followed him, the men think-/ing of the many pounds of good beef/ he was running off with, and I what a/ treasure his skin would be fore the mu-/seum./

About noon it began to rain with a/ cold wind that made the drops feel/ like hail stones. They took off their/ shirts and sat shaking as if with the/ auge, while I was crouched under the/ little shelter which was too small to/ cover both me and the baggage. We/ drifted on in this way until about four/ o'clock, when we reached the little/ island of Limon [Limón], the first settlement/ below Boja [sic; Borja], and for many years the/ highest point inhabited by Chris-/tians - if these can be called such - on/ the Maranon [Marañón]. It is and has been in-/habited for many years by an old man/ with his four sons and their families./ They preferring this advanced and/dangerous post to a safer life, where/ they would be subject to the inso-/lence and selfishness of white gov-/ernors. Every one of them can boast/ of several infieles - the unfaithful - the/ name given by the Spanish to the/ Indians that have been killed by/ them, either by fair means or foul./ Their houses are full of spears, blow/ guns, shields,

beads, and other tro-/phies of victory. They, with the In-/dians of Barrancas and other vil-/lages along the upper Maranca, have/ lost their language, and only speak/ the Inca or Quichua - the lingua-/geral of Peru. One of the old man's/ sons, himself already well in years,/ received us, and did all he could to/ make us comfortable, offering me his/ own cot for my bed. After the baggage was well out of the rain, and I had put on dry clothes, I went/ to the other houses of the village,/ where they invited me to enter, and/ offered me the inevitable bowl of/ masato⁸⁹. I was very much pleased to/ be able to examine their habits of/ life, and they seemed to be as much/interested in me, especially in my/ beard, which must have been the first/ they ever saw, as they stroked it,/ smelt of it, and examined to see it it/ really grew fast or was only stuck on./ I bought several pacunas90, with beads/ and head dresses captured from the/ Huambises [Huambisa], and after considerable/ trouble prevailed on them to sell me a/ shield and spear, the latter of chunta⁹¹/ - a hard kind of palm wood, the for-/mer of some soft white wood and/ three feet in diameter, both the same/ in use and shape with those used by/ the ancient races of Europe. One of/ the men took one of the shields on/ his arm and showed me all the feints/ and passes of a real battle with the/ Huambises [Huambisa]. Finding myself in such/ good quarters, I concluded to pass/ the next day in hunting and buying/ more curiosities. My host brought/ me my supper of three small fish and/ some ripe plantains boiled, and while/ eating them I saw for the first time/ the process of making masato. A/ large earthen kettle of boiled yucca/ stood by the fire, and my host's wife,/ an old woman who looked as if she/ had lived to make many pots of mas-/ato, filled

her mouth from the pot with/ her fingers, and then went about her/ household duties, chewing as she/ worked. When the mass in her/ mouth had reached the proper fine-/ness, she emptied it into the pot and/ filled again, working at this as steadi-/ly as more civilized old ladies do at/ their knitting. When the yucca is re-/duced by boiling and chewing to a/ pulpy mass, it is put away in large/ pots that hold several gallons each,/ and allowed to ferment. When drank/ ti [sic; it] is dipped out in mocowas [sic; mocauas] – curious/ painted earthen bowls, and mixed/ with water, when it tastes and looks/ like sour buttermilk./

The next morning, while the women/ were at the river bank after water, they/ became very quiet a few moments,/ and then they began running back/ and forth, half with excitement,/ shouting "Waugana, Waugana," – the name in the Yuca [sic; Inca] language for/ the white lipped peccary⁹²./

The men listened until they were/ sure the good news was true, and/ then ran to their huts, and returning/ with the lances they had captured/ from the Huambises, they jumped in-/to the canoes and paddled across the/ river, one having taken time to seize/ his paint pot and draw several great/ red lines across his cheeks, and to put/ on in place of his pants a short petti-/coat that reached half way to his/ knees. My host for lack of a lance/ took his pecuna [pacuna] and paddled across/ with the rest. The barking of the/ dogs and the harsh sound made by/ the peccaries, by snapping their teeth/ together, soon became audible to my/ less practiced ear, and after a couple/ of hours three of the boats returned/ with seven of the peccaries, most of/ them young and with the great lance/ wounds in their sides. The women/ now hurried down to the canoes and/ were soon busy cutting up the pork,/ the men showing how each one was/ killed, as it was taken from the canoe/ showing how there was a tree in the/ way, and after the game had passed/ into sight, how they threw the lance./ The women carried the meat to the/ house, and singing the hair off, put it/ under a slow process of roasting and/ smoking, with which it will keep sev-/eral days. After an hour more my/ old friend returned, not having ar-/rived in time to share with the rest,/ while the dogs kept the peccaries at/ bay. He had followed on and killed/ a large one with a little poisoned ar-/row from his blow gun. I saw here/ all parts of the operation of cloth/ making. The spinning is done by/ twirling a spindle with one hand,/ while the other regulates the supply/ of cotton. The spindle is made of/ chunta, and has a little disc of turtle/ shell to give it weight, the whole/

⁸⁹ Masato – Called *caiçuma* in Brazil. May also be prepared with fermented flour of the fruits of the *pejibaye* palm tree (*pupunha* in Brazil) (*Bactris gasipaes*), corn (maize) etc.

⁹⁰ Pacuna - "The most deadly weapon the Indian [...] uses is its pacuna or blow-pipe, out of which he sends his arrows, dipped in the fatal wourali poison. The poison takes its name from the wourali wine, the scraped wood of which, and some bitter roots, form the chief ingredients, boiled together. The rites and incantations employed, and the numerous other articles added to the poisonous cauldron, may remind one of the weird sisters' concoction in Macbeth. The pacuna is composed of a very delicate thin reed, perfectly smotth inside and out, which is encased in a stouter one. The arrows are from nine to ten inches long, formed of the leaf of a species of palm, hard and brittle, and pointed as sharp as a needle. At the butt-end some wild cotton is twisted round, to fit the tube. About an inch of the pointed end is poisoned. Quivers are made to hold five or six hundred of these darts. The slightest wound causes certain death within a few minutes, as the poison mixes with the blood, and completely paralyses the system, causing, probably, little or no pain" (Kingston, 1853: 289-290).

⁹¹ Chunta - Bactris gasipaes (Arecaceae).

⁹² Tayassu pecari (Link, 1795) (Artiodactyla, Tayassuidae).

looking much like the spindle of our/ old fashioned spinning wheel. The/ rolls are little fellows five or six inch-/es long./

The piece in the loom was about/ two feet in width and perhaps two/ yards in length. They were weaving/ in stripes of four colors, those being/ made of native barks and fruits. This/ piece was destined for one of those/ curious garments that supplemented the/ women's short petticoats, serving for/ mantle and hood, being drawn over/ the upper part of the person when/ they enter the churches, where they/ are not allowed to go in their usual/ scanty garment, thus making it neces-/sary for every maiden of the tribe to/ possess one before she can be mar-/ried./

This was probably destined for the/ bridal mantle of the girl who was/ weaving it, under the supervision of/ all the old women in the village,/ They are coarse, and must be very/ durable, and after they have faded,/ they are colored the common dull/ brownish black, and do duty for pet-/ticoats for most of the time. The/ loom was put up in a shed, and was/ as rude as the rest of their imple-/ments. I noticed here also curious/ combs made of splints of cane, woven/ together with thread. I tried to ex-/change my comb for one of them, but/ the old lady preferred her own make/ to the new fangled notions of the/ whites./

The next morning I hired a canoe/ to take me to this place, and my/ friends the Indians put on board a/ plentiful supply of peccary pork and/ plantains, and we bade them *Adios*,/ my host embracing me and kissing/ my beard at parting. I had paid/ them well for what I had taken,/ and this was so different from the/ grasping habits of their white mas-/ters that I had made great reputa-/tion among them./

The little island of Limon [Limón], contain-/ing perhaps fifteen acres, is about/ half under cultivation, but it supports/ these four families in plenty, and as I/ passed through the large orchards of/ plantains I saw dozens of great/ bunches ready to gather, and some of/ them falling and going to waste/ with ripeness. Many of these bunch-/es contain over a hundred plantains,/ and one would supply a person with/ vegetable food for ten days. There/ were also large patches of fine yucca,/ and the spots of freshly worked land/ here and there showed the industri-/ous habits of these people who, living/ in the greatest plenty, still provide/ for the distant future; for if they/ should stop work entirely they would/ not want for food for several years./

For what few things they need/ from the whites, they wash gold from/ the sand of plaias [sic; playas], using their canoes/ for cradles and fathering the gold,/ which is in very small particles with/ quicksilver. They are said to wash/ out a castillano [sic; castel-

lano], which is about a/ third of an ounce, and got for this in/ goods, at the trader's own price, two/ dollars and a half. With security/ from the wild Indians and good meth-/ods of washing the sand, practical/ miners should make money here. I/ reached this place without accident/ before night.

J. B. STEERE

Letter XLII [Peninsular Courier and Family Visitant, 11(25), June 21, 1872]

FOREIGN CORRESPONDENCE

Number XLII

YURIMAGUAS, PERU, March 8th, 1872.

The next day after my arrival at/ Lagunas, while busy writing, I heard/ the church bells ringing and a great/ rush outside, and got to the door just/ in time to see forty women old and/ young, most of them wearing only/ the short petticoat, tearing past on/ the run and dragging after them a/ great stick of timber by a wild vine/ sixty or seventy feet long. The/ church doors were opened, and the/ head of the team ran inside until the/ log was drawn to its place. It would/ have made the fortune of a photo-/grapher to have taken a picture of/ the scene. The long string of women/ with hair flying loose running along,/ with five or six men behind throwing/ rollers under the log to make it run/ easier. The old mud church was/ falling down, and this stick was des-/tined for a post to help uphold the/ roof of a new one, and daily the/ women of the town were called to-/gether by the church bell to draw up/ up [sic] a stick of timber, until there were/ enough for the work. After the stick/ was in place the women separated to/ their different houses, seeming pleased/ to have done this much in God's ser-/vice. We often hear it said that/ women are more devoted to religion/ than men, and perhaps the same cause/ that makes women of civilized coun-/tries so constant at church and at/ other exercises connected with reli-/gion, impels their mahogany colored/ citizens here to drag heavy timbers/ from the woods to build churches./

I soon found in my walks about the/ town, that for some reason the people/ were very much afraid of me, they/ generally clearing the street as far/ ahead as they could see me, and/ when I passed a house I would hear/ a shout and the scampering of feet in/ every direction. When I entered any/ of the houses there was

a rush for the/ back door by all, unless some old man/ or woman too decrepid [sic]. After a few/ days of this, finding that I was not/ progressing in the good graces of the/ people, I asked the Governor what was the matter, and he told me that/ the Cocamillas believe that a man/ with a beard is the evil one himself./ The pottery of these Indians is all/ painted with curious chair-shaped/ figures, identical with that upon the/ pottery dug up on the island of Mar-/ajo [Marajó], and I had hoped to make a large/ collection; but my evil reputation among them prevented business./

The daughter of the Governor,/ who had lived among them nearly all/ her life, fortunately spoke their lan-/guage perfectly, and I procured a/ large vocabulary of words with a/ couple of words given in the different/ persons and numbers. The language/ is much more perfect than any others/ I have tried to write, and as there are/ some words similar to words of the/ same meaning in the "lingua geral,"/ the Cocamillas may be part of the/ great Tupi nation that inhabited so/ much of Brazil. It is reported in this/ part of the country that the men and/ women of this tribe speak two differ-/ent languages; but the only ground/ for such an opinion that I could find/ was in the personal pronouns, the/ men saying "ta"- I and "tana" - we, while the women say "isti" - I and/ "peno" - we. This difference is car-/ried out in the pronominal adjectives,/ and really makes the language as/ spoken by the men and women sound/ quite differently. The verbs are con-/jugated regularly - "a" being the/ sign of the present tense, "tsure" of/ past, and "utso" of the future./

I had become acquainted with the/ school teacher of the town, a young/ man from Chachapoyas, and one day/ visited the school. The school house/ is a little mud hut on one side of the/ plaza, without windows and a dirt/ floor, and serving to shelter the/ padre's sheep as well for a seminary/ of learning. As I entered the recita-/tions stopped for a moment, while/ the little fellows saluted me with a/ storm of "Buenos dias, senhor [sic; señor]!". Upon one side of the room were per-/haps twenty Indian boys seated on a/ wide bench with wooden tablets in/ their hands, upon which was written/ the alphabet, and they were very/ busily engaged in reciting it at the/ top of their voices. They were/ dressed in jacket and trowsers, col-/ored the usual dull brownish black,/ which seems to have been happily/ to show neither dirt nor cleanliness,/ and both were lamentably deficient in/ material, being short at both ends and/failing to meet by a long distance in/ the middle; but they served the pur-/pose of the law, as custom required/ the scholars to be clothed./

On the other side of the room were/ ten or twelve white children and half/ breeds from eight to sixteen years/ old, and some of them had reached/ to the dignity of spelling out senten-/ces, a pitch of language that is likely/ never surpassed in Lagunas. They,/ like the Indian boys, were reciting at/ the top of their voices, this seeming/ to be the universal custom in the/ Portuguese and Spanish schools, and/ good for the lungs if it has no other/ advantage./

Five Indian boys who did not have/ tablets, were standing with a stick/ before a large board on the wall with/ the alphabet written in it. Three/ or four white girls were seated behind/ the house, and this comprised the/ whole, the Indian girls not being re/quired to have any book learning./ The schoolmaster was seated on a/ bench smoking a paper cigar when I/ entered, but in honor of my visit set/ one of his pupils to clean up the floor,/ and another for a fire brand to re-light/ his cigar./

While the master was talking with/ me the fire of recitation gradually/ slackened to the irregular rattle of a/ skirmish, and the teacher judging of/ the amount of study by the noise,/ took his cigar from his mouth to shout/ "ler! ler! [sic; leer]" - read! read! and at it/ they went again "ah, bay, say, day,/ ay, affy," but some soon began to fall/ out, and by the time they reached the/ middle of the alphabet there seemed/ to be danger of a dead stop, but now/ some happy genius struck in again at/ the beginning, so that the din was/ kept up. The master now went out/ to visit the girls back of the house,/ and the little fellows stopped reciting/ about as soon as he passed the door,/ and I was pleased to see the real/ school boy spirit showing itself among/ them. One little fellow got into the/ middle of the room and cut a rough/ jig, keeping a sharp look out for the/ master meanwhile. Another was/ throwing nut shells at the head of a-/nother little fellow sitting on the other/ end of the seat, and a third, a minia-/ture merchant, for the lack of slate/ pencils and pins was trading wild/ fruits, with which his jacket was/ stuffed, for a piece of dirty writing/ paper, with one of the white boys./ The voice of the master was now/ heard shouting "ler! ler! [sic]" and at it/ they went again as if they would tear/ the alphabet all to pieces. After a/ couple of hours spent in this way, five/little Indians were called up as an ex-/ample for the rest, as I could not see/ how they had transgressed, and the/ master gave each a good blow with/ the palmatory, for which they said/ "gratias senhor [sic; gracias, señor]" - thank you sir! -/ nearly all the Spanish they knew be-/side their prayers. They all then/ knelt down before the master, and/repeated after him the creed, and then/forming in line marched around him/ and out at the door; when away they/ ran like young deer to strip off the/ jackets and pants that must have/ made them feel as if in the stocks. I/ begged one of the tablets and the/ palmatory of the teacher, and for a/ few days the little fellows will go/ without punishment. The teacher/ told me that the Indians never go/ beyond the alphabet. Their princi-/pal learning is the prayers of the/ church and the catechism which they/ must know before they can be mar-/ried. Saturdays they recite only/ prayers, and every morning while the/ priest is in town the older boys and/girls were gathered together in the/ open front of the church. The girls/ with mantles down over their/ heads kneeling on one side, and the/ boys on the other, while the priest/ walked back and forth before them/ teaching them the prayers and cate-/chism. As soon as they have learned/ the necessary prayers, they get mar-/ried, the girls at twelve and fourteen,/ the boys at fourteen and sixteen years/ of age. The woman then undertakes/ all the drudgery of Indian housekeep-/ing, carrying wood and water, and/ working the chacra that supplies them/ with yuca and plantains, while the/ man spends his time in fishing and/ drinking the masato his wife prepares/ for him. They are a short but stout-/ly built race, the men not averaging/ more than five feet two or three in-/ches and the women less than five/ feet./

When one of the tribe dies they/ break to pieces and burn up his pro-/perty, and cut out a piece from the/ middle of his canoe in which they/ bury him. Widows and widowers, if/ they marry the second time must do/ so with those who have been married/ before, a regulation that some would/ rejoice to see adopted among civiliz-/ed people. They generally seem to/ have large families, the Governor say-/ing that some have eight or nine/ children, and the tribe should be rap-/idly increasing, but the rapacity of/ the whites keep them hiding in their/ chacras which are scattered here and/ there along the river and smaller/ streams, where they are most hidden/ from sight. On feast days they/ gather into town, led by the music/ and show, then the Governors catch/ them and put them to work./

On the 6th of the month the steam-/er came up bringing six or seven of/ the Cocamillas who had been drafted/ to work at Yquitos [Iquitos], and were now re-/turning having served their time./ Their wives were on the the [sic] bank/ watching for them, having rigged out/ in all the finery they possessed; sev-/eral of them having the peculiar/ chair shaped figures painted upon/ their under lips and chins, and one/ had them painted upon her arms./

After a few days spent most pleas-/antly with the Governor, Don Cas-/tillo, with good beef and choco-/late such as was never drank in the/ States, I got my baggage and col-/lections on board safely, and was/ happy to find my mail of December/ on board. The first I had received/ in four months. We arrived here/ yesterday, and to-day the steamer/ goes back, leaving me to make my/ way to the Pacific in canoe, on foot,/ and on horseback./

J. B. STEERE

Letter XLIII [Peninsular Courier and Family Visitant, 11(26), June 28, 1872]

FOREIGN CORRESPONDENCE

Number XLIII

CHANUCI [sic; Shanusi], PERU, March 8th, 1872.

Yurimagus [sic; Yurimaguas] is a squalid little town/ of four or five hundred inhabitants,/ built upon a bluff of red clay, and/ gets its only importance from the fact/ that it is the present head of navigation/ where passengers, mails, etc., for/ Lima and the Coast, leave the/ steamer and take the slower and/ more uncertain methods of transpor-/tation by canoe, on foot, and on horse-/back. Its people are a mixture of the/ many tribes around, with a few per-/sons of Spanish blood./

I met here a strange personage in/ the Baron Turonne, a French noble-/man, who has brought a few French-/men here, and is trying to found a/ colony. He is a tall, thin, stooping/ man, with hair that reaches to his/ shoulders, and dressed in a long,/ loose coat and pants, he reminds me/ much of the traditional Yankee. He/ has a curious theory in regard to this/ country, believing it to be the site of/ all the ancient cities mentioned in the/ Bible. He pointed out Borja as the/ site of ancient Tyre and Sidon, and/ placed the Garden of Eden on the/ river Ucayali. In the names of rivers/ and towns now in existence here, he/ discovered great similarity to those/ of ancient times, and considers the/ Yuca [sic; Inca] language as the parent of the/ Greek and Latin and Hebrew. He/ seems to be fully convinced of the/ truth of his theories, and told me/ that he had a great work in contem-/plation, and had already published/ several articles in Geneva, and a map/ of this country, showing the site of/ the ancient towns. He kindly invited/ me to go

with him to his place called/ Limon, on the little river Paranapura;/ but my business would not allow./

As soon as I was settled, I set/about buying some of the curious/ painted pottery made by the Indians/ here. I found none for sale, but an/old Indian woman was making some,/ and promised to have them done in a/ couple of days, which I found to ex-/tend to nearer two weeks. I took an/ interpreter at first, as I could not/ speak a work of Inca and she as little/ Spanish; but after the first visit I/ used to go alone to the door of the/ hut, when the old women would say/ "shamwe" - come in, and I would go/ in, and seated on a stool would watch/ the different parts of the business of/ making and painting the pots. The/ pots are made as in Brazil, of clay/ tempered with the ashes of a certain/ tree. This clay is then worked out/ into little rolls about the thickness/ and length of the finger, and the/ women [sic] seated on the ground builds/ up the pot with these, laying them on/ one at a time and smoothing them/ and bringing them to shape with the/ fingers and a small bit of wood or/ shell. The Brazilian Indians would/ call the pot finished now, and after/ allowing it to dry for a few days would/ burn it and put it to use; but a Coca-/milla would be ashamed to be seen/going to the river to get water with/ such a pot as that upon her head, and/ after it has been worked into shape it/ is carefully rubbed all over with white/ clay, and then allowed to dry for a/ few days, when the arduous task of/ painting on the figures is undertaken./ Beside the white clay which gives/ the white ground color to the pots,/ I have seen them use two other/ colors, both made from stone, one a/ dark brick red, and the other yellow,/ These are likely red and yellow ochre./ They are rubbed with water upon/ another stone until the paint is of the/ required thickness, and then the/ woman seated on the ground in the/ middle of her hut with the pot be-/tween her knees, lays on the colors/ with different sized brushes made of/ grass. As soon as the paint is dry/ the pot is burned, when the dark red/ color is changed to almost black, and/ the yellow to bright red./

The old woman would paint and/ burn but one pot a day, but finally set/ her daughter, a woman of family, to/ painting too, though she was only/ allowed to paint suns and flowers,/ the old woman only undertaking the/ peculiar chair like figures in which I/ was interested. After a few little/ presents to smooth the way, I got/ from her the following account of/ the origin and significance of this/ curious figure. It was to represent/ the Yacomama [Yacumama]⁹³, or mother

of the/ water – an immense serpent of most/ beautiful colors. She said that there/ had been a time when there were/ women of the tribe who could print/ the Yacomama [Yacumama] in all its colors; but/ they were long ago dead – the old/ story of modern degeneracy./

While waiting for my pottery I/ spent my time in collecting the lan-/guages of several tribes of the vicin-/ity, among them the Chamicuros94 [Chamicaro],/ Muniches⁹⁵, and the Hiberos⁹⁶ [sic; Jíbaro]. The/ language of the Chamicuros [Chamicaro] is full of/ those German sounds that the beginner finds in such words as "ich"/ and "auch." The men from whom I/ procured this language seemed to act/ as journymen [sic] plasterers and painters/ for the mud walls of the town. They/ did nearly all their work with their/ hands, using them for trowels and/ brushes, and the walls of all the/ houses of the town show their finger/ marks. When I saw them they were/ working on the next house, two/ plastering on the mud with their/ fingers, while two others below were/ mixing it in the same way and hand-/ it up in earthen bowls. As I heard/ their strange speech and found the/ name of their tribe, I prevailed upon/ the young Peruvian trader, for whom/ they were working, to call the most/ intelligent looking one in, so as to pro-/cure some of his language. He/ seemed much pleased with the prom-/ise of a drink of cachaca [sic; cachaca], and stood/ with the mud dripping from him,/ while through the medium of the/ Inca – a language used by all tribes/ and colors - we went on glibly/ enough until I had a fine list of names/ and adjectives, and tried to get some/ verbs; but this was too much for the/ poor fellow. He grew uneasy, the/ sweat poured off of him, and he final-/ly broke down altogether, and we/ could only get a few gurgles and/ gasps from him. We gave him his/ drink of cachaca [sic; cachaça] and he went out of/ the door with a curious little whoop/ of relief, and was soon happy again/ with his arms in the mud, while he/ gave his mates a most animated de-/scription of the horrors he had ex-/perienced in his brief trial of literary/ life. We called in another, but he/ trembled, and the sweat poured down/ his clayey cheeks before we had/ asked him a question, and we got for-/ward but little with him. We met/ with the

⁹³ Yacumama (mother of the water). Cf. Recharte & Arévalo More, 2003.

⁹⁴ Chamicaro – Arahuaca linguistic family. Department of Loreto, at Huallaga river.

⁹⁵ Muniche – Unclassified language. Other denominations of the tribe: Otanava, Otanaba, Munichina, Munichi. Nowadays restricted to the city of Muniches, Paranapura river.

⁹⁶ Jíbaro – Jíbaro linguistic family. Other names: Mayna, Shiwiar. Department of Loreto, at rivers Tigre, Corrientes and Macusari.

same success with a third,/ and I left the Chamicuros language,/ somewhat in doubt whether it had/ more than one mood and tense or/ not./

With the Muniches Lan-/guage I fared better, there being a young fellow in town of that tribe/ who would pronounce and repro-/nounce the words for me until I could/ repeat them after him but with the/ language of the Hibisos [Jíbaros], a curious/ tribe who live [sic] to the north of Yurim-/agues [sic; Yurimagua], between the Maranon [Marañón] and/ Huallaga, but who are almost gispseys [sic]/ in their wandering habits, I again/ had trouble. The only one of the/ tribe in town was a great strapping/ girl who served as cook at the Gov-/ernor's, where I was stopping. It/ was only after much persuasion and,/ as I expect, commands on the part of/ the Governor that she consented to/ give me her language at all, and then/ before I was ready to write it she/ had hidden and had to be dragged/ from a corner by the Governor's/ daughter, when she came up to the/ table with her hands over her face/ and giggling through her figures./ Then she stood like a stock until she/ was urged to desperation by repeated/ questions, when she suddenly stooped/ down and opening her fingers whis-/ pered the word in my ear, and then/ again had to bear an assault of per-/suasion before I could get another./ Finding I was not likely to get what/ I wished of the language in a month/ of this, and suspecting the cause of/ her bashfulness to be the three or/ four half breeds. and low caste Peru-/vians, the retainers of the Governor,/ who hung laughing about the table,/ I rather unceremoniously invited them/ to leave, without taking time to ad-/dress them by the title of Don and/ Cavaleiro [sic; caballero], which they all expect./ After this I got on better though the/ Hibera [sic; jíbaro] would now and then have a/ fit of the sulks, and after two or three/ evenings spent in this way I had com-/pleted my list./

The languages of these different/ tribes seem to have no connection/ with each other or with the Inca,/ though closer examination may find/ some similarity. The names of the/ numbers even, that in all the Euro-/pean family of languages show such/ similarity, seem radically different/ with each tribe./

I think the Yankee will have to/ give way in the matter of curiosity to/ the low class of dependents of white/ blood here in Peru. One always sus-/pects the Yankee to have an eye to/ business and profit in his questions,/ but these people seem to be moved by/ mere curiosity. I have several times/ been put through a course of ques-/tions of which the following is a fair/ example. A greasy, slovenly looking/ follow sauntered up to my door in/ the morning when I was hard at/

work packing my collections, and/ after waiting a minute for an invita-/tion to enter, which I was too busy to/ give, he took one step into/ the room and looked about, and/ then another, until he had planted/ himself fairly inside, when he began/ the following fire of questions. What/ is your name? Jose [sic; José]. What is your/ business? Collecting. What salary/ do you get? my board and clothes, - / pointing down to the old pants I/ wore while at work. Where are you/ going to from here? To Tarapata [sic; Tarapoto]./ And where do you intend to go to/ from there? to Moyobamba. What/ is there in that flask? aquardente [sic; aguardiente]./ Will you take that with you? yes./ What is there in the that box? bird/ skins. In that other? other things./ By this time, from my answers, be-/ginning to suspect that I was not par-/ticularly pleased with his questions/ he slowly turned and went out, salut-/ing me respectfully as he passed the/ door. All of these questions were/ asked in that delicate, polite way, of/ which the Spanish language is so/ susceptible, and with that air of defer-/ence that these people always use in/ the presence of their superiors, so that/ I could not take offense and could not/refrain from giving an answer without/ real rudeness. After each of my/ answer my visitor would draw one/ of those double nasals, that seem to/ serve for affirmations the world over,/ through his nose, and appear to deep-/ly ponder my words for a few mo-ments before asking another question./

After the old Indian woman had/ finished my pottery, and I had been/ fortunate enough to find and pur-chase several earthen vessels of the/ tribe of the Conibos97 of the river/ Ucayali who make much finer pottery/ than the Cocamillas, I packed my col-/lections and was ready to start on toward the coast. When I applied/ to the governor for men he declared/ there were none to be had and would/ not likely be any for three or four/ days. He had already done much to/ delay me and as I was paying him/ for my poor fare of fish and plantains/ the price of living at a first class ho-/tel, I began to suspect he was in/ want of money, and he, finding I was/ getting angry, hurried about and in a/ couple of hours had procured me/ three men. They were all old fel-/lows, one who acted as steersman/ having a hump back; another grizzled/ old fellow was drunk and staggered/ ed [sic] into the boat, vowing by word and/ look that if I would give him another/ drink he would follow me to the ends/ of the earth. The third had his hair/ cut close to the scalp on all the back/ part of his head, leaving a lock

⁹⁷ Conibos or Manoas, Pano linguistic family. Pampa del Sacramento and banks of Ucayali river, Peru.

in/ front, that hung down to his eyes./ His ears stuck up level with the top/ of his head and altogether he cut a/ most comical figure. His mate was/ fortunately not too drunk to pull at/ the paddle and we were soon leaving/ Yurimaguas behind, with little regret/ on my part./

After paddling a few miles we/ turned in the Chaunci [Shanusi] river, a rapid,/ shallow little stream, filled with fallen/ timber. The men now cut long/ smooth canes with which the banks/ were covered, and poled the boat the/ rest of the way, the water seldom/ be-/ing over three or four feet deep. At/ a plantation of plantains, and a little/ tambo when we passed the bight,/ there was a fellow in whom the Indi-/an and Spanish blood was so intimate-/ly mixed that I could not tell which/ to call him. He came to me cringing/ like a dog and begged permission to/ go up the river with me. During the/ rest of the trip he served me like a/ slave, bringing me at night my sup-/ per of boiled plantains and fish in a/ plantain leaf for a plate, and then a/gourd of water from the river. After/ we reached Chanuci [sic; Shanusi] he wished to fol-/low me farther as my servant, but I/ did not feel able to support so much/ style. The rule of men of money/ over the poor whites and Indians in/ this country is one of iron yet, with/ Republican government, it must have/ been terrible indeed in the time of/ Spanish rule. The second night of/ the voyage, as we were sleeping in a/ tambo (a shed without enclosure that/ is put up in the plantains [sic] to shelter/ the laborers during the rain, or along/ the roads for the accommodation of/ travelers,) we were all suddenly awa-/kened by a tiger roaring near us. He/ likely wished to make a supper of/ the dog that was with us, but the/ next time he roared he was farther off/ and we lay down and went to sleep/ again. The next day, the third of the/ voyage, as the river was very wind-/ing, often returning upon itself, I/ stopped to hunt at one of these places/ while the men were poling the boat/ around the bend. I had with me a/ flask containing several gallons of/ strong aquardente [sic; aguardiente] for preserving spe-/cimens in which I had put carbolic/ acid. I knew the Indians would/ drink it if they could, and I had stop-/ped it very securely, but when the/ men came around and I got into the/ boat again, they were suspicioously/ happy, and upon examining the cork/ I found they had pried it out with the/ points of their knives, and had care-/fully replaced it after drinking what/ they wished. I did not know but the/ carbolic acid would kill them, but it/ only seemed to make them the more/ happy. The two old fellows in the/ bow of the boat got especially funny/ crying like babies and mewing like/ cats and then shaking with

laughter/ at their wit. They soon began to/ sway from side to side of the boat,/ and I expected to have to stop, but/ we came opportunely to the improve-/ment of Mr. Arevallo [Arévalo], a young Peru-/vian who was educated in England/ and Germany, and now returns with/ the expectation of making an im-/mense farm here that will supass [sic; surpass] any-/thing on the upper river. He set my/ men to loading their canoe with fish,/ and sent them on nearly sobered by/ the hard work and I waited a day at/ his place, and then came on here/ with him, making the trip in two/ days more

J. B. STEERE.

Letter XLIV [Peninsular Courier and Family Visitant, 11(27), July 5, 1872]

FOREIGN CORRESPONDENCE

Number XLIV

CHANUCI [sic; Shanusi], PERU, April 5th, 1872.

This village contains perhaps one/ hundred and fifty inhabitants of the/ tribe of Cowapanas [sic; Capanahua]98, who formerly/ lived at Balsa Puersto [sic; Balsapuerto], on the main/ route from Lima to the Amazon,/ driven from there by the heavy bur-/dens they were compelled to carry,/ they fled to this place only to be fol-/lowed by the whites and compelled to/ carry burdens from here across the/ mountains to Tarapota [sic; Tarapoto]. We arrived/ in the midst of processions and feasts/ that celebrate the "Santa Semana" [sic; semana santa] / - sacred week - of the suffering, death/ and resurrection of the Savior. In/ the evening the old koraka [curaca], or chief/ of the tribe, with his alcaldes or lieu-/tenants, came solemnly in, each carry-/ing his staff of office, to conduct my/ friend, who had lately been appointed/ Governor of the villages, to the pro-/cession. We found the little mud/ church nearly filled with people. The/ Indian women kneeling on the ground,/ while the men and boys waited around/ the doors for the procession to form./ The images of the church, consisting/ of a cross, and a life size image of St./ John, which had been badly singed/ by his drapery catching fire at

⁹⁸ Cowapanas – Capanahua, Pano linguistic family, self-denominated Nuquencaibo. Nowadays restricted to Loreto, rivers Tapiche and Buncuya.

some/ former feast, and a doll like image of/ St. Joseph, that had been fitted out/ by one of his hat making admirers/ with a funny little Panama hat, were/ all arranged on hand barrows that/ were covered with leaves and flowers/ and wax candles, and as we entered/ the candles were lighted, and the/ barrows containing the cross and St./ John were each shouldered by four/ young Indians, while four Indian wo-/men, two of them with habits slung/ to their backs, picked up the barrow/ containing St. Joseph and the Pana-/ ma hat and carried it in the same/ way. The alcaldes now handed each/ of us wax candles and the procession/ started, being led by Indians carry-/ing a little red banner surmounted by/ a cross, and accompanied by others/ carrying wax candles pasted to long/ poles. The images followed, with/ the people, men, women and children,/ Indian and white, clustered irregu-/larly about them, almost all with/ lights, some with candles of white or/ black wax, and others with smoking/ torches, made of gum copal wrapped/ in reeds. The sacristan, a half breed,/ chanted a hymn to the Savior as we/ marched down the little street, and/ the few women of white and mixed/ blood who followed responded at the/ end of each stanza with the follow-/ ing words, "Por tu passion Jesus/ meo a bracadme vuestra mor [sic];" "By/ thy suffering, my Jesus, thy love embraced me," sung to sad but sweet and/ simple music. After thus passing the/ length of the little village, the proces-/sion returned to the church, the ima-/ges were replaced, the people all/ knelt while the sacristan repeated a/ prayer, and we returned to our lodg-/ing. Early the next day, that of Good/ Friday, the rattle of sticks, which a/ couple of boys carried about town, in/ place of the ringing of bells, now in-/ terdicted, and the general stir and/ hustle among the Indians showed this/ day to be the culmination of all. At/ an early hour six or eight Indians/ marched to the church, one armed/ with an old musket, the rest with/ lances of chunta and with pucunas [pacunas]./ They were to represent the Roman/ soldiers who guarded the tomb, and/ when I visited the church they were/ standing at the doors, while inside,/ arranged on one of the barrows for a/ bier, was a little image of Christ/ dressed as for burial. All day the/ koraka [curaca] and his alcaldes were busy/ superintending the construction of/ little arbors along the street, and all day/ the boys with the rattles went up and/ down calling the people to the work./. The arbors were made of palm leaves/ twelve or fifteen feet long. Those in/ which the smaller pinnate leaves had/ not yet unclosed from the stalk were/ chosen, and these young delicate/ leaves were opened by hand, leaving/ the whole length of the stalk covered/ with delicate streamers of a light/ yellow color. These were planted in/ the ground and tied together at the/ tops, and then hung with flowers and/ wax candles. Besides these, others/ smaller were made of saplings bent/ and stuck in the ground at both ends/ and then covered with leaves and/ flowers, which were tied on with/ twine dipped in wax. In the even/-íng the koraka [curaca] came as before to con-/ duct us to the procession. When/ we arrived at the church the images/ were arranged as before, with the ad-/dition of that of the Savior at the/ bier. Indian women again carried/ the image of St. Joseph, but young/ men with faces daubed with white/ clay and with pointed caps of white/ canvass carried the bier and the im-/age of St. John. The koraka [curaca] had/ considerable difficulty in getting the/ procession formed, but we finally/ started, the alcaldes handing us can-/dles as before. As we came out of the/ church the tapers upon the arbors had/ been lighted and the street was filled/ with lights. The procession was/ again led by the red banner and the/ lights on poles, and as the procession/ passed under the arbors these had to/ be lowered each time. The bier/ with the image of the Savior brought/ up the rear followed by the sacristan,/ the koraka [curaca], and the other potates [sic; potentates] of/ the place, when it reached the first/ arbor the bearers lowered it to/ the ground and the sacristan chant-/ed an account of the sufferings of the/ Savior on his way to calvary, and the/ women again responded, chanting/ mournfully the words "misericordia,/ Senhor, [sic; Señor]" - mercy Lord. The bier/ was then taken up and the process-/ion moved on until it had reached an-/other arbor, when the sacristan/ chanted an account of some other/ suffering of Christ on the way to cru-/cifixion and the women responded as/ before. The arbors seemed to repre-/sent those places where the Savior/ underwent some special suffering or/ indignity, and at each the same cere-/mony was performed. After thus/ passing the length of the street the/ procession returned to the church and/ another prayer was recited by the/ sacristan. The people remained and/ seemed to expect something more,/ and I heard that these were to be/ "penitents." After waiting nearly/ an hour I walked down the street to-/ ward home, but hearing a noise in/ the half darkness, for the lights had/ mostly burned out, I went near and/ found two Indians kneeling under one of the arbors. Each held in one/ hand a whip made of bark and in the/ other a cord a couple of feet in length/ to the end of which was fastened a/ ball of wax weighing several ounces,/ in which were inserted pieces of glass/ that stuck out in sharp points on all/ sides like rays so that nothing but/ the points could touch the flesh./ These instruments of torture they/

were slowly swinging first over one/ shoulder and then the other like the/ swaying of a pendulum. The blood/ was already gushing in streams from/ their backs and flowing down over/ their pants, their only article of cloth-/ing. After several minutes of this/ dull thud, thud of the instrument as it/ struck their bare back, they got up/ and walked slowly side by side to the/ next arbor diligently lashing their/ backs with the whips meanwhile;/ when they came to the next arbor/ they knelt as before, and thus they/ made their slow way to the church/ door, here they knelt again, and again/ the waxen balls slowly but surely/ swung. Then they got up and/ walked a few steps toward the altar/ and again knelt. The blood had now/ saturated their canvas pants and was/ actually running off of their heels be-/hind. After they had reached the/ foot of the steps to the altar they rose/ and a couple of young women step-/ped out of the crowd that were look-/ ing on, and gave them each an egg./ They then knelt and kissed the foot/ of a little cross that had been placed/ on the steps and put the eggs, stained/ by their bloody fingers, in a plate be-/side it, and then rising went a few/ steps toward the door and knelt to/ again scourge their backs. By this/ time several other couples who had/ followed on in the same bloody way/ had entered the church and were/ slowly moving toward the altar. All/ were presented with some little offer-/ ing by the Indian women to put in the/ plate, a ball of cotton yarn, and egg,/ or a piece of wax. After each couple/ had deposited their gifts they slowly/ made their way out of the church/ kneeling and scourging their backs/ as they went, and then back through/ the arbors to the house from which/ they started, at the other end of the/ village./

An hour later they all passed, on/ their way up the river to bathe,/ each accompanied by his wife or/ sweetheart, carrying a clean pair of pants, and a torch to light the way,/ for fear, weakened as they were by/ the loss of blood, they would stagger/ in and drown. But the stoicism that/ had led them to endure all this pain/ without a groan or a quiver of the/ muscles had left them. They had/ stood the test like men, and now, as/ they walked over the uneven ground,/ many were the exclamations of pain/ that they uttered./

This institution is said to come/ from the Jesuits, and from the name/ "penitents," but probably it was in-/tended for the remission of sins, and/ it has likely long ago lost any such/ signification among the Indians, and/ is only kept up as one of the cere-/monies of the feast, because it affords/ an opportunity for displaying that/ stoicism, under the infliction of pain,/ that is a universal trait of the In-/dian character, and which leads one/ of the wild tribes of this country

to/ subject its young men to the stings of/ the terrible 'tocandeiras" - the great/ stinging ant - before they will admit/ them into the tribe as warriors, and/ among some of the North American/ Indians compelling the young men to/ fast for many days, to prove their en-/durance and rights to tribeship. I/ noticed that all who underwent the/ infliction were young, strong men,/ prevented from making war. This is/ the only way the young braves of the/ tribe have of showing their courage,/ and I imagined the Indian maidens,/ as they presented their lovers with/ the little offerings to be put in the/ plate, were as proud of them with/ their bloody backs as their grand-/mothers were of them, when they/ brought back from the war the heads of/ their enemies. I thought that one young/ fellow, who had laid on the scourge/ with rather a light hand, so that the/ blood hardly reached to his heels,/ was not going to get an offering at/all, but a young girl finally stepped/ out and handed him an egg, with an/ air that said I am ashamed of you./

This scourging is said to be com-/mon among the Hiberas [sic; Jíbaros], Cocamas,/ Cocamillas, and other tribes of this/ region during this festival, so that in/ the larger towns one or two hundred/ may be seen engaged in it. The/ effects are said to last but a short/ time, and I saw some of them danc-/ing the next day./

J. B. STEERE

Letter XLV [Peninsular Courier and Family Visitant, 11(28), July 12, 1872]

FOREIGN CORRESPONDENCE

Number XLV

CHANUCI [sic; Shanusi], PERU, April 5th, 1872.

About ten o'clock, the next morn-/ing after the scourging, the old gun/ that served for a cannon was fired,/ and the bells were set ringing and/ the little drums beating and fifes/ playing, while two or three cows'/ horns added their doleful music to/ the general din. Five young men,/ with coronets made of the long red/ and blue plumes of macaws, and with/ other plumes of the same in their/ hands, and with strings of rattles/ made of nut shells upon their legs,/ began at the same instant a dance be-/fore the open church door. They/ danced in line, one behind the other,/ posturing and waving their plumes./ The dance was

very rapid, and the/ rattles were so arranged that they/ shook at every movement. All at/ once the dancers took of [sic; off] their coro-/nets, bowed almost to the ground/ toward the church, and the music and/ dancing ceased. The procession was/ now formed again, but this time the/ image of the Saviour was carried/ upright, with a little red banner in/ its hand - a risen Lord, while the/ dancers passed before it as the pro-/cession passed around the village./ When the images were again replaced/ in the church, the real feast began./ A large house seventy or eighty feet/ long, nearly opposite where we were/ stopping, had been chosen as the/ house for the feast. This, like all the/ houses of the village, was a great/ shell, with roof of palm leaves and/ enclosure of canes stuck upright in/ the earth. Benches were arranged/inside, about the upper end of this,/ and a long narrow table made of/ cane, reached along the side. At the/ farther end, twelve or fifteen large/ monkeys - howlers and maca sapas [?] -/ hung back and grinning against the/ wall, showing the diligence the owner/ of the house hads used in preparing/ food for the feast; for they repre-/sented many long days of hunting/ in the forest. They had been cured/ by singing the hair off, and then/ smoking over a slow fire./

Upon one side of the home, near the/ centre, were ranged five or six large/ earthen pots, that would hold ten or/ twelve gallons each, and these were/ filled with masato and covered with/ banana leaves, while besides them was/ a heap of mocowas [macouas], or earthen bowls,/ for drinking. The masato was the/ proof positive of the masticating/ powers of the women of the house-/hold, as the man's success in hunting./

Another huge earthen pot holding/ more than half a barrel, filled with/ monkey, was boiling at the farther/ end of the room, and around it sev-/eral smaller ones with plantains./

I wished to see the feast and pre-/vailed upon my friend, the Governor,/ to accompany me. As we entered,/ the maker of the feast came forward,/ and saying the word of welcome,/ "chamwe," conducted us to a seat,/ while four women, each with great/ bowls of masato, and little gourd/ dippers to serve it with, were stand-/ing ready to wait upon us as we sat/ down. We tried to swallow our re-/membrances of how it was made, or/ at least to hope that it was made by/ the pretty young women who handed/ it to us, each of whom had her lips/ stained violet and lines of the same/ color reaching from the ears to the/ eyes and mouth. Besides this, the/ little hands that stirred the masato/ for us and picked out the stems of/ yuca, in place of gloves, were stained/ violet to the wrists,

and their bare/ feet and ankles were also beautiful in/ the same way to the height of stock-/ings. To have refused to drink would/ have been an affront to the maker of/ the feast, and a great breach of/ politeness, and as we both had strong/ stomachs we passed the ordeal with almost as much coolness as the/ scourgers had shown the night before./ The masato in itself, was not at all bad,/ though I cannot imagine why the In-/dians should have such a passionate love/ for it. Each woman had a different/ kind, either made in different ways/ or flavored with different aromatic/ fruits. It was the business of these/ women to be continually passing/ about the house, offering in rotation/ every one in the house a cup of/ masato when their bowls were/ emptied, refilling from the huge pots,/ and beginning again where they had/ left off. After the women had passed/ on, we had a few moments to look/ about us. Several musicians were/ seated on a bench at the upper end of/ the room, and before them were danc-/ing the five men in macaws feathers/ and rattles, while in the centre of the/ room were several other musicians./ moving about in a circle, playing an/ independent tune, and making all the/ noise they could. The men of the/ village were seated on the benches/ about the upper end of the room,/ and the women on the floor at the/ farther end. Several women were/ engaged in dipping heads and arms/ and hands of monkey from the pot,/ with large wooden spoons, and filling/ bowls with them and with boiled/ plantains./

The maker of the feast and his as-/sistants were seating the guests at the/ table, which was so high that their/ eyes could just reach to its level. The/ Koraka was placed at the head of the/ table, and the others were seated ac-/cording to their importance, with all/ the formality of an English dinner./ We were invited to a seat next the/ Koraka [curaca], but the Governor did not/ wish to stop, and the women with the/ bowls of masato had nearly reached/ us again; so we beat a hasty retreat./ After the dinner was over we heard a/ great shout, and soon the women/ came pouring out of the back way/ each with a bowl of food, the re-/raims of the feast, each going to her/ own dwelling. It seems that the/ feast maker is expected to feed the/ whole village as long as the feast/ lasts. We now eatened again for a/ few moments, and after one of the/ dances had come to an end the Koraka/ stood up and asked who would make/ the feast the next year. It was no/ small matter to undertake to supply/ the whole village with monkey and/ masato for a week, and the matter/ was discussed with considerable free-/dom. After this question was set-/tled, the dancing and music again com-/enced, several women now entering/ the circle of moving musicians, and/dancing, not as I had seen

the Pebas/ Indians in couples fronting each/ other, but each capering here and/ there as best suited her fancy, her/ violet feet flying as the spun about,/ oblivious of all but the dance. We/ had already tasted of a dozen cups/ of masato in as many minutes, and/ beginning to feel as if we should go/ to capering ourselves if we drank/ much more, we again hurriedly made/ our salute to the host and went out./ The dance was kept up all night, and/ the next morning all classes and sexes/ had become hilarious. The dancing/ had been done in a solemn and reli-/gious way, but now, several men,/ each supported by two women, around/ whose necks his arms were thrown,/ the women clinging to him the same/ way, came out of the feast house fol-/lowed by the music, and went danc-/ing here and there all over the vil-/lage, two or three women whose hus-/bands were perhaps too drunk to/ dance, dancing alone among the/ others./

The women were dressed for the/ occasion in bright red, and yellow/ petticoats or kilts, which, with the/ violet arms and ankles, produced a/ novel effect. The men seemed to be/ too drunk or stupid to take much/ care for the dance, only to keep their/ feet moving, while the women would/ swing them about by main force at/ the proper part of the music. There/ were collisions and falls in plenty, at/which the crowd following would/ burst into a roar. The whole jolly/ scene reminded me of descriptions of/ English May Day festivals. The/ two or three women who were danc-/ing singly, generally led the way, en-/tering this and that house and cutting/ a few capers and then out and off to/ another, always returning to the feast/ house as a collecting point. That/ night there was little dancing, and I/ thought the feast was over, but they/ were only resting a little for the/ grand final day, and early in the/ morning were at it again madder/ than ever. After the dinner with all/ its ceremonies was over, I again/visited the feast house. There were/signs of breaking up, and the new/ feast-maker, with two assistants, was/ going around inviting all, according/ to custom, to come to his house to in-/augurate the feast for the coming/ year. His invitation to all was/ "chamwe," pointing in the direction/ of his house. His assistants followed/ immediately behind him, repeating/ the same and even taking the invited/ guest by the shoulder and poiting/ in the direction of the new feast/ house./

These men passed around the sec-/ond and third time, so that each one/ there must have received at least nine/ invitations. I wished to see the cer-/emonies at the inauguration of the/ new feast, and having so many invita-/tions, the Governor and I felt free to/ go at an early hour. The house had/ been swept and

prepared, and was/ arranged in all respects like the first,/ even to the pot of boiling monkeys./ The new feast-maker received us and/ seated us, and then came round and/ welcomed us to his house./

As before, the guests were seated/ according to their consequence. We/ were pressed to take seats at the/ head of the table with the Koraka,/ and our refusal interfered somewhat/ with the order of things; but now/ great bowls of monkey and plantains/ were placed before each guest by the/ feast-maker and his assistants, and/ the heaping dishes were not simply/ put down before them on the table,/ but each guest was addressed per-/sonally, and the dish put into his/ hands with words of welcome and in-/vitation. After they were all served/ in this way, the host went around/ with a dish of meat and piled another/ piece upon each one's dish. The/ Koraka's plate was piled as high as/ the food would lay on, and among the/ rest were several boiled eggs. The/ Koraka now addressed a few words/ in their own language to those at the/ the [sic] table, when the alcalde got up/ and asked all to stand up for a bless-/ing. The sacristan then swaid "Pa-/dre Hijoy [sic] Espirito [sic] Santo" - Father,/ Son, and Holy Spirit – and all set at/ it to eat./

But now a great noise was heard/ outside and the door being burst/ open a young Indian came running/ in on his hands and feet, having his/ face painted and a piece of nonkeys [sic; monkeys]/ skin tied over his chin to represent/ the protuberance in the throat of the/ howlers, while a boy was clinging to/ his back as the young monkeys do to/ the backs of their mothers. He tried/ to climb up the low posts that sup-/ported the cross beams of the roof/ but with the immense amount of mas-/sato he had drank he made but a/ clumsy monkey and had to drop his/ young one, before he could succeed./ He was followed by several others/ also on their hands and feet, and who/ also made their way to the cross/ beams over head. Now came in a/ young fellow carrying in his hands a blow gun,/ while at his side was hanging the/ curious quiver and gourd of cotton/ that go with it. He was followed by/ another, also masked who represented/ his wife, wearing the petticoat and/ having an immense carrying basket/ on her back in which cooking/ utensils and all the paraphernalia that/ an Indian woman carries when she/ follows her husband to the woods on/ a hunting expedition, and among the/ rest were some fire brands. The man/ now began shooting at the monkeys/ above, his wife pointing out where/ they were. He directed his arrows/ at those parts of their bodies left un-/covered by their scanty jackets and/ trousers, and though they were with-/out points they must have hurt. The/ pretended monkeys

rubbed the spots/ hit, caught at the arrows and made/ all the gesture and grimaces of mon-/keys when shot by poisoned arrows,/ and finally all came rolling down and/ lay on the ground as if dead. The/ woman now took the things from the/ basket and began to make a fire with/ the brands, scattering the coals plen-/tifully over the dead monkeys who/ slowly crawled out of the way. She/ now seemed to be undertaking the/ business of singing off their hair and/ preparing them to take home, while/ the man sauntered off with his blow/ gun in search of more game; but/ while she was trying to pull one great/ strapping fellow into her basket he/ came to life and caught her, and at/ that all the rest jumped up, when the/ man came running in, and, liberating/ his wife all rushed out altogether./

The play seemed quite appropriate/ in a feast in which monkeys [sic] flesh was/ the great delicacy, and procured in/ the way represented, but whether the/ monkeys seizing upon the woman has/ some foundation in tradition or his-/tory, I could not find out./

After the play the feast went on,/ those at table picking some tid-/bit from their bowls with their fin-/gers, their only knives and forks, and/ going to some particular friend they/ would put it in his mouth. Some-/times this was enough to choke one/ but it must be received in the mouth,/ to offer to take it in the fingers being/ a great breach of politeness. The/ old koraka seemed to be especially/ favored in this way and before one/ bit was swallowed some one else was/ crowding another between his teeth./ But though the bit must be received/ in the mouth there seemed to be no/ objection to taking it out afterward,/ and after the koraka had eaten all he/ wished he would take the bits from/ his mouth and going to some less/ favored individual would transfer them/ to his mouth in the same way or/ would beckon to the boys about the/ door to give to them. After all were/ satisfied they set up a shout of thanks/ to the host and praise of his dinner,/ and at this signal the women seated/ in the back part of [sic] came hurrying up,/ and each taking a bowl of the re-/mains from the table went out to the/ back door and ran home and I saw/ one or two took a bow in each/ hand, in the same spirit as those old/ ladies at home, who, at picnics and/ Sunday school celebrations fill their/ work basket, as well as their stomachs/ from the nicest cakes, in return for/ the one sour gooseberry pie they/ brought. In a few minutes the wo-/men were retuning with the empty/ bowls and again seat themselves on/ the ground. The men still remained at/ table and after water had been passed/ to rinse their mouths and fingers, the/ sacristan recited a prayer, when the/ women brought each one a huge/ bowl of masato, containing at least/ two or

three quarts, and they were/ expected to soon return the bowls/ empty. Some, in spite of the amount/ they had eaten and drank, swallowed/ the whole almost at one draught/ while others taking their bowls left/ the table and seating themselves upon/ the benches, placed the bowls on the/ ground between their feet and gazed/ long and sadly at them as if they/ could dry them up in that way. Two/ or three took their bowls and went/ out doors where they caught every/ boy they could find and made him/ swallow some of their allowance, and/ in this way were soon able to show/ their bowls bottom side up. Those/ who were not accommodated at the/ first table were now seated at the sec-/ond, and the same formality as at/ the first was gone through with./ The table was not filled this time by/ men, and the women were allowed/ to fill the vacancy, though as if con-/scious of their inferiority, they stood/ up. Toward the end of the dinner/ when the picking out of nice morsels/ and putting them in friends [sic] mouths/ became in order the women were not/ al all backward in this part of the/ ceremony, and many a young fellow/ was made happy by having a nice bit/ stuffed into his mouth by the violet/ fingers of his sweet-heart, and while/ seeing the performance I almost/ wished the same custom prevailed in/ the United States. After the dinner/ the men and women danced together/ again about town and at night we had/ another procession, and the feast was/ at an end.

J. B. STEERE

Letter XLVI [Peninsular Courier and Family Visitant, 11(35), August 3, 1872]

FOREIGN CORRESPONDENCE

Number XLVI

TARAPOTO, PERU, April 12th, 1872.

On the seventh of this month the/ feast being over, I procured In-/dians to carry my baggage, and set out/ for this place. My peons were boys,/ from fourteen to sixteen years of age,/ the men of the village all being em-/ployed to carry cargoes of fish. They/ were expected to carry fifty pounds/ each, half a load, and arranged by baggage in regular peon style in bun-/dles which were supported upon their/ backs by a broad band about the/ forehead; the head being thrown for-/ward to lessen the strain upon the mus-/cles of the neck so that the eyes were/ directed

upon the ground, between/ the feet, bringing the weight between the shoulders. Besides my baggage/ each had his own, consisting of a/ piece of pounded bark, to sleep upon,/ and a bit of coarse sheeting for a/ blanket, and with these a few plant-/ains, and a mass of masato wrapped up/ in a plantain leaf. It is the custom of/ these Indians to always travel with/ masato, some in addition to their regu-/lar load carrying and earthen pot of it,/ others wrapping ip up in this way. At/ every little stream the load is dropped/ and a handful of this is mixed with a/ gourd of water and drank and then/ they go on again. The Yuca, a spe-/cies of the mandioca, is only used by/ the Indians for masato, they rarely/ eating as a vegetable, though it is/ only second to good potatoes. The/ path led for the first part of the way/ along the Chennel [sic; Shanusi] River, though low/ clayey bottom lands, and was knee/ deep in mud and water, which with/ the roots made a terrible road, but/ the boys trudged on, their pants their/ only clothing, being rolled up above/ their knees and their loads resting/ upon their backs. In the afternoon/ we left the river and reached a higher/ country, which was intersected by/ slugglish streams and swamps now/ overflowing with water. I saw here/ for the first time the Brazilian cedar/ growing in any quantity, but though/ the trees were large and fine they were/ scarce, being scattered here and there/ among the other timber. The Indi-/ans cut these for canoes, which when/ made they haul by hand miles through/ the forest to the water./

The tree though called cedar has no/ relationship with the cedar of the/ United States, not even belonging to/ the cone bearing trees. It seems to/ be the same as that used in cigar boxes/ and has a strong odor, which prevents/ the insects from eating it, and with/ its lightness makes it almost the only/ timber on the Amazons. The two/ or three saw mills on the Amazon us-/ing little else, and picking up their/ supply from the river where they find/ it floating. I have not yet seen upon/ the main river or any of its branches/ timbered lands that would compare/ with our forests of oak, maple and/ pine, in size and height of the trees/ or in quantity per acre. There is once/ in a while an immense tree that cov-/ers half an acre with its shade, but/ the timber is generally small and/ standing close together. Those that/ have value for their beauty, such as/ the tortoise shell wood or "mara pin-/nimi" [sic] and the wood of the cross/ "palo de cruz," are taken from the/ centres of large trees, an immense/ amount

of sap wood being hewed off/ to procure a stick a few inches in di-/ammeter; then there is such an endless/ number of species growing together/ that there is great difficulty in getting/ a quantity of any one kind. The/ quantity and value of the timber of/ the Amazon seems to have been im-/mensely over estimated./

After we reached the higher coun-/try, I hunted in advance of the boys/ and came to a large open tambo,/ where I supposed they would arrive/ in good season, and waited for them/ until it was too late to go back to find/ them, so I passed the night alone/ without fire or supper or blanket./ Other travelers had cut palm leaves/ to sleep upon and these were fortun-/ately under shelter and dry, and mak-/ing a bed of them I lay down and/ slept as well as I could for the cold./ In the morning, as I started back af-/ter my boys, I saw the track of a large/ panther in the mud in the path. He had/ apparently been examining my quar-/ters but had concluded not to molest/ me. The boys had passed the night/ beside the path a couple of miles back/ where they had built them a little shel-/ter of palm leaves. They were eat-/ing their breakfast of roasted plant-/ains and fish and seemed to expect a/ good beating for not coming to find/ me, but as I could not speak their lan-/guage and they could not understand/ Spanish, I sat down and ate breakfast/ with them, after which one of them/ who had fortunately brought along/ masato made from boiled ripe/ plantains instead of that made from/ yuca, brought me a gourd full of it as/ a peace offering. It had fermented/ sufficiently to make a pleasant acid/ drink, and was without the unpleas-/ant memories connected with masato/ of yuca. After their breakfast, as a/ dessert they went along the path and/ dug out with their knives some large/ ants which they ate alive with great/ gusto. The [sic] were apparently the same/ as the sambas [sic; saúvas] eaten by the Brazilians/ and seemed to be females just enter-/ing the earth to found new colonies./ We arrived that day at the village of/ San Juan Loma, where we passed the/ the [sic] night. There was no person who/ could speak Spanish, but the Koraka [curaca]/ furnished me an empty hut, and by/ signs I made out to buy something to/ eat. I had been stung by one of the/ great stinging ants or "tocandeiras100"/ and was using Sal Amoniae, and, as/ he seemed very curious, I let him/ smell of it. It was very strong and/ after catching his breath he ran away/ in a great fright, thinking I had the/ evil spirit in the bottle sure, but after/ he found he was unharmed and that/ used it with safety, he brought a small/ shell for lack

⁹⁹ Marapinima or muirapinima, name applied to several different genera and families, but especially to the genus Brosimum (Moraceae).

¹⁰⁰ Paraponera clavata (Fabricius, 1775) (Hymenoptera, Formicidae, Ponerinae).

of a bottle and begged/ a few drops, and then went around/ putting it under the noses of all his/ tribe he could meet, and laughing all/ the harder at their astonishment be-/cause he had been so frightened him-/self. We were just at the foot of the/ mountains here and the next morning/ after fording a rapid but shallow river/ of sixty or eighty feet in breadth that/ comes dashing and roaring out of/ a mountain george [sic; gorge] we began ascend-/ing. After climbing until nearly night/ we halted at a little tambo perched on/ a ridge of neck just wide enough for/ it and the path. We were above the/ region of the palms, and the tambo/ was covered with fern leaves, of which/ the boys gathered more for our beds,/ and after our frugal supper, we went/ to sleep, but about midnight were/ awakened by myriads of ants that/ were at work eating to pieces [sic] and/ carrying off the fern leaves of our/ beds. The boys tried to stop them/ with fire, but they marched on over/ the dead bodies of their comrades,/ each with a piece of leaf in his mouth./ When morning came, the branches/ about the edges of our beds were/ trimmed clean./

The next day we reached the top of/ the first mountain, from which there is a grand view of the low lands to-/wards the east and north, an immense/ level forest as far as the eye can reach/ and I could imagine it reaching with hardly a break to Para [Belém], over two thous-/and miles below. Just at our feet was/ the Yano Yaco [sic; Yanayacu] river, meaning the/ Inca tongue, white [sic; means "black"] water, so named/ from its being dashed into foam in its/ rapid course over the rocks [sic!]. To pass/ this mountain we had to climb up the/ steep faces of the rock, hanging on/ by the roots of trees. In many places/ there were steps worn into the rock by/ the bare feet of those who passed. Near/ the top, engraved upon a large block/ of sandstone near the path were some/ curious characters that appeared to/ be ancient among them, a human foot/ with a sandal. This had been rudely/ copied by more modern artists, and/ some pions [sic; pious] traveler in gratitude for/ having reached the top in safety had/ cut a rude cross. From this we de-/scended into a valley and after traveling several hours in a rain storm, built/ us a rude shelter by the road site and/ passed the night there. The next/ day we began to climb mountains/ steeper than before, and at one diffi-/cult pass hearing a noise above us I looked up and saw five Indies a hun-/dred feet almost perpindicular [sic] above,/ climbing along the face of the rocks/ like monkeys, each had his blow gun/ and a large basket on his back, and/ they were even carrying their dogs./ They proved to ve an old man and his/ four sons from Lamas who had been/ across the

mountains on a hunting ex-/pedition, and were returning with/ baskets loaded with smoked monkey/ flesh and whatever else they could/ find of use./

This path seems to always follow over/ the very peaks of the mountains ins-/tead of seeking a more level but lon-/ger way in the valleys below. After/ passing three peaks one after another/ we came out upon the last one, and/ the country about Tarapoto lay like a/ great map far below us, no longer a/ country of deep level forest, but a/ broad valley with several streams just/ from the mountains dashing through/ it, and beyond low rounded hills, in/ some places stretching away in great/ open plains, while still beyond rose up/ another lofty range of mountains. I/ breathed freer as I thought I had left/ the realms of rain and shade behind/ me and had reached a country where/ the light of the sun could reach the/ earth.

Though these mountains can not be/ more than five or six thousand feet/ high, I noticed a marked difference in/ the vegetation. The trees were small/ and dwarfed and among them were/ some of the family of our whortle-/berries. They were clothed in mosses/ and curious delicate species of ferns,/ while the ground was carpeted with/ the deep moss or Sphagnum that/ grows in bogs at home while here and/ there were delicate little selaginellas/ and some delicate flowering plants/ that the Amazon with its Victoria re-/gias and giant palms cannot produce./ These peaks seems [sic] to be the very/ home of the winds, and they blow as/ if they would pick us up and hurl us/ into the valley below. Every few/ moments great masses of cloud would/ be driven about, covering everything/ below from view. The trees were/ dropping with moisture though it was/ not raining we being in the very midst/ of the cloud. The path on this side/ of the mountain was dry and there/ did not appear to have been rain for/ many days, though we had passed out/ of a heavy and continuous rain storm/ but a few miles on the other side./ At the foot was the little village of/ Cambassa [sic; Cumbasa] on a river of the same/ name. The valley is very narrow/ and filled with immense boulders and/ the houses are built here and there/ among them as though they had been/ left by the river in the same way./ The governor whom I found swing-/ing in his hammock hurried his dep-/uty off to trade needles for some/ eggs, giving him special orders to/ trade two needles for one egg, and/ it was only after repeated explana-/tions that he could be certain that it/ was one needle for two eggs, or one/ egg for two needles. After hunting/ all about the village he found five/ of the desired article and we soon had/ supper of them and baked plantains,/ eating it with wooden spoons from/ rude Indian pottery, but with all an/ improvement upon the style of eat-/ing during the trip across the moun-/tains. After supper while waiting/ for my peons, who were far behind,/ I had time to look about the town/ a little. The houses are mostly of/ mud and looked remarkably small af-/ter having seen the large cane bar-/racks of the Indians in Chanaci [Shanusi]./ Several large fruit trees were grow-/ing here and there, and the ground/ was covered by a turf of grass, which/ was kep closely cropped by several/ horses and cattle that were feeding/ about the houses. When the peons/ came up, I put a part of my bag-/gage upon the one who appeared to/ be least tired, leaving the other two/ there and come to this place where we arrived after dark./

J. B. STEERE

Letter XIVII [Peninsular Courier and Family Visitant, 11(36), September 6, 1872]

FOREIGN CORRESPONDENCE

Number XLVII

TARAPOTO, PERU, April 26th, 1872.

Tarapoto is a mud-built town of/ two or three thousand inhabi-/tants, situated near the junction of the/ river Mayo with the Huallaga. It is/ spread out over a broad plain, formed/ by the valleys of several clear, swift/ mountain streams. On every side/ rise mountain ranges, covered in some/ places with grassy plains, in others/ with forests, and in others too steep/ for vegetation to hold fast, the bare/ gray rock crops out./

The houses are scattered here and/ there, as if they had fallen into their/ places, and are generally unfenced./ Near the banks of one of the streams/ they struggle into two or three/ nar-/row, irregular streets, just wide/ enough for two loaded donkeys to/ pass. The houses are low and small/ in comparison with the great bar-racks of cane built by the Indians/ across the mountains. They are gen-/erally without windows or window-/openings - the doors admitting light/ and air. The walls are two feet thick/ and are built up like concrete walls/ at home, by putting up boards and/ filling it with mud, which is allowed/ to dry before another layer is put on./ The town is full of these old walls/ still standing, though the palm leaf/ roofing has long fallen. These/ walls are sometimes whitened with/ gypsum, but they are more generally/ left their original dirt color, and with/ their brown palha roofs

the appear-/ance of the town is somber enough./ The town is far from navigable waters/ or other circumstances that would/ give it commercial importance, and/ the site was likely chosen by the In-/dians, its original inhabitants, on ac-/count of the good soil and climate./ But the Indian is fast fading out, and/ the whites have taken up with their/ custom and live in the same aimless/ way. The idea of improvement,/ which is such a part of our nature as/ a nation, has no place in their imag-/inations. To plant little "chacras"/ of plantains – as their fathers did; to/ cover their mud hove with a new/ roof of palm leaves, no better than/ than [sic] the one that has decayed; to/ dance at the feats, and to enjoy the/ present with no thought for the future,/ is their life, and it seems as if they/ must give way to a stronger, more/ energetic race, before this beautiful/ land is inhabited by a people that/ befits it./

At a distance of two day's [sic] journey/ is the post of Chasuta [sic; Chazuta], on the Hual-/laga, to which canoes ascend with/ cargoes from Yurimaquas [sic; Yurimaguas], which are/ then brought here on the backs of/ peons. The only articles of exporta-/tion are hats and cotton cloth, which/ are sent to other towns of the interior./ The hats are palm leaf or panama,/ but inferior to those made in Moyo-/ bama [sic; Moyobamba]. The making of coarse cotton/ cloth seems to be the principal busi-/ness, and the first sound one hears in/ the morning is the clatter made by/ the women in beating the cotton./ The seed is picked out by hand, and/ the cotton then spread upon a cow/ skin upon the ground and a couple of/ women squatted on opposite sides,/ with a stick in each hand, beat it/ until it is fulled sufficiently to form/ into rolls. The spinning wheel is a/ rude machine like a low grind-stone,/ and one of these may be seen before/ almost every door – a little boy or/ girl not yet old enough to run away/ from its mother in the streets, being/ seated on the ground beside it to turn/ the crank. There is no arrangement/ for winding up the thread, and the/ woman with a bundle of the curious/ little rolls in her belt starts out across/ the common or along the street, putting the thread over a stake or/ branch of a tree here and there to/ support it, until she has used all the/ rolls, when she winds up the thread,/ giving the little fellow at the wheel/ time to straighten his legs, when she/ begins again. As one passes along/ the streets in the morning or evening/ he is continually bowing down to/ pass under these lines. This thread/ is afterward woven upon rude looms,/ into coarse but strong cloth, that/ holds its place in the market here in/ spite of the cheap English goods./

The climate on this side of the/ mountains is much cooler and drier/ than in the valley of the Amazon, and/ the vegetation is not so rampant./ Among the plants cacti and agaves/ are already conspicuous, and there is/ no longer need that the peons should/ cut away all the vegetation from the/ public squares and from about the/ houses every month, to keep the/ town from growing up to forest./ Along the streams and about the/ town are many spots covered with/ grass that is kept closely eaten by the/ cattle, forming a smooth sod that is/ pleasant to walk upon. There is not/ a grass plot upon the whole Amazon./ The system of cultivation is the same/ as in Brazil, a little piece of the for-/est being cut down and burned, and/ then planted to yucas and plantains./ After two or three years, during/ which the only cultivation is cutting/ up the woods now and then with a/knife, the timber is allowed to grow/ up again, and a new piece of forest/ is cut down; so that there is now no/ more land in cultivation than there/ was forty years ago. The soil is well/ fitted for cultivation with the plow,/ and the place might be abundantly/ supplied with food; but beef is dear-/er than in New York city, and butter/ and cheese, what little is used, is im-/ported. Plantains are the principal,/ and with most of the people, almost/ the only food, being varied now and/ then with a little fish or a few beans./ Dried fish, the principal animal food, comes from Yurimaquas [sic; Yurimaguas] by canoe and/ on the backs of peons. Those who/ are too poor to buy this, now and/ then go fishing with barbascum, the/ white roots of shrub they cultivate in/ their chacras. Forty or fifty of them/ often unite to fish some lake [sic] or/ bayou, those connecting with the/ river being generally chosen. The/ small streams and bayous connecting/ with this are first beaten, to drive the/ fish into the lake, when the barbascum/ is pounded with water in the canoe,/ forming a milky liquid which is then/ dipped out into the lake. The small/ fish first rise to the top of the water,/ and after several hours the larger/ ones. The fishing is a great day for/ the birds as well as for the men, and/ gulls and divers, and other sorts of/ birds, are busy getting their share./ There is a feast for a few days after the fishing, and then they fall back to/ plantains again until their hunger for/ animal food drives them off again./ This town in spite of its fine climate,/ is terribly plagued with skin diseases./ There seem to be of two classes, one/ that appears in open ulcers, and often/ upon children. The other is a/ scaly eruption that discolors the skin/ so that one can not tell what the/ original color was. For this latter,/ the women who wish to preserve/ their good looks, wash in the juice of/ a fruit which colors the skin a curi-/ous blue black, and these

can be met/ every day passing along the streets,/ the effect being much as if they were/ masked. After this stain wears off,/ the skin is said to regain something/ of its original color. There are vari-/ous theories for this disease, some/ imputing it to food, others to the/ water. It seems to trouble those of/ mixed blood more than the pure/ whites or the Indians; and perhaps/ it is the judgment of God or nature/ upon this "crossing of the races."/

Several "trapiches" or cane mills/ scattered along the streams near the/ town, supply the aquardente [sic; aguardiente] needed./ These can easily by found, for the/ groaning and creaking of the wooden/ clylinders [sic; cylinders], between which the cane is/ pressed, can be heard as far as the/ noise made by the howling monkeys,/ to which it bears a striking resem-/blance. A large open shed is built,/ which covers the cane mill, the still,/ and gives plenty of room beside for/ the peons who are at work, to eat and/ sleep. In one of these that I visited/ the motive power was a diminutive/ pair of oxen that were followed by a/ lean bearded fellow from the moun-/tains, naked to his waist, and carrying/ a stalk of cane, which he used to en-/courage them on, as well as all manner/ of Spanish expletives shouted at the top/ of his voice. Three others were put-/ting cane though the rollers, - after/ it had gone one through, seizing it/ and twisting two or three canes to-/gether and then passing them through/ again, and so four or five times/ before the cane was sufficiently pressed. Several Indian girls were/ at work dipping the juice from the/ trough, into which it ran, with gourds,/ and carrying it to a canoe which/ served for storage, while several more/ men were busy roasting and eating/ plantains and tending several/ babies that were crawling about or/ swinging in hammocks from the raft-/ers. At the other end of the shed/ several others were busy making/ aquardente [sic; aguardiente] at a rude still made of a/ large kettle with a wooden top, in/ which was set a copper dish with/ cold water. A wild cane conducted/ the spirit into a bottle below. Indi-/ans were now and then coming in/ with back loads of cane from the/ little patches on the hillsides about,/ each taking his dram before going/ back to his work. As I came up,/ one of the Indian girls was sent to/ bring me a gourd of the cane juice/ to drink, and one of the men who/ seemed to serve as overseer, brought/ a bottle with some of the spirit they/ were making. It is pretty weak, but/ by continual drinking they make out/ to get drunk upon it. There were/ likely fifteen or twenty persons en-/gaged in making aquardente [sic; agardiente] with/ that little yoke of oxen, when within/ a few rods ran a good mill stream/ that would have ground twenty/ times the cane and

with less work./ This region is filled with fine mill sites,/ but lumber sells at forty cents a foot,/ being all hewed out by hand; and the/ rock salt of the country and the corn,/ what little is eaten, is mashed with/ stones by the women./

After several days spent here in/ looking about the town, and in rest-/ing from the hard trip across the/ mountain, I hired a peon of the Gov-/ernor and set out for the little village/ of Juan Guerra, at the junction of/ the rivers, and a couple of leagues/ distant, where I had heard of fossil/ bones. The peon was one of the/ mixed race, and his original color had/ long ago gone out under a cloud of/ blotches of "Sarna," as the disease/ is called here. He was a faithful/ fellow, his only failing being his love/ for aquardente [sic; aguardiente], which he was contin-/ually begging of me – a "realito,"/ just one little real./

We passed through a fine country,/ the woods not being as dense as be-/low and consisting in part of cactus,/ which grows here to the size of trees,/ the trunks losing their angular shape/ and appearing, but for the leafless/ branches above, like any other trees./ Along the road were great groves of/ lemons that have run wild, the ground/ being covered with fine fruit that lay/ rotting, being too sour for any thing/ but man to eat. The fossils are found/ in a high bank of the river, and out/ of reach, the only ones procured be-/ing such as fall as the river under-/mines the bed of gravel in/ which they are found. By falling/ they are generally badly broken, and/ I could get nothing of much value./

I met here an old Dane, whose/ light hair and beard and English/ face, made it seem strange that we/ should be compelled to use the Span-/ish language as a means of communi-/cation. I visited him in his cabin,/ which is a couple of miles from the/ village, and went over his little plan-/tations with him. He was cultivat-/ing the soil with a hoe instead of the/ knife which is so universally used/ here, and his crops already show the/ superiority of European ideas of/ farming. He had a strange story to/ tell of his hardships since he had set-/tled here. About four years ago he/ came here, and putting up an open/ shed covered it upon one side, and./ then went to work clearing his/ "chacras," but was soon after taken/ with rheumatism in both knees, so/ that he could not get from his cabin/ to the little stream that ran a few/ rods off after water, and here he lay/ for two years in a hammock under/ his little roof in an open shed. He/ was fortunately near the path that/ led from the river to the village, and/ depended upon the passers by to/ bring him a gourd of water or a/ bunch of plantains, and for that long/ two years his

only food was roasted/ plantains. He could sleep but little,/ and he said used to think and think/ until he became almost crazy. One/ night as he lay awake, a large animal/ came into his cabin and stood near/ his hammock. It was too dark to/ see what it was, but he supposed it/ might be a large dog. After waiting/ over an hour, until the moon rose, he/ saw a large tiger crouched beside him/ with its head within a couple of feet/ of his face. After thinking for a few/ moments what to do, he suddenly/ sprang up in his hammock and shout-/ing, struck the tiger with his fist./ The tiger, frightened by this sudden/ movement, jumped out of the cabin/ and ran off. At the end of two years/ he began to crawl out again, but/ found his plantation all grown up to/ timber, and once more he began to/ clear a chacra, little by little at first,/ sitting down every few minutes, so/ that it cost him three months to clear/ a patch that would ordinarily be done/ by him in two weeks. He is now/ strong, and says that he can do more/ with his hoe than four men with/ knives, and he has already begun to/gather crops and fruits of his own/ raising after this long suffering/ and waiting.

J. B. STEERE

Letter XLVIIII [Peninsular Courier and Family Visitant, 11(37), September 3, 1872]

FOREIGN CORRESPONDENCE

Number XLVIII

MOYOBAMA [sic; Moyobamba], May 2d, 1872.

The distance from Tarapoto to this/ this [sic] place looks insignificant upon the/ maps, but it cost me five long days of/ hard travel on a mule. The first day/ I came to the town of Lamas, passing/ through rich valleys at first and then/ up the mountain side, the road in many/ places following along the edges of/ upturned strata of limestone and/ sandstone that lie at an angle of twen-/try-five or thirty degrees. In one/ place were large quantities of fossil/ oysters still clinging to the rocks to/ which they grew. They are appar-/ently of the same species as those/ still existing along the Atlantic coast/ of Brazil. Lamas possesses about the/ same number of people as Tarapoto,/ but is if possible in still worse repair/ than that town. It is built upon both/ sides and upon the top of a sandstone/ ridge, from which the vegetation has/ been

worn by the feet of its people,/ and the soil has been carried off by/ the rains leaving the town upon the/ bare rock. The ruins of a large mud/ church upon one side of the plaza/ shows that the town has seen better/ times. The river Mayo runs near the/ town, but several hundred feet below/ it. Lamas must be a thousand feet/ above Tarapoto and the climate is/ delicious. The nights are cool, and/ the bare rocks breed no insects. A/ few potatoes are raised in the little/ chacras along the hill sides. After a/ day at Lamas I passed on to Tobalo-/sas [sic; Tabalosas] crossing the Mayo on the way,/ here a rushing, roaring river of twen-/ty or thirty rods in width. They fer-/ried me and my baggage across in a/ large canoe the mule swimming be-/hind./

Tobalosas [sic; Tabalosas] is a squalid place of few/ hundred inhabitants, but the govern-/or informed me that it was very rich/ in gold and silver, though no one has/ been able to find it as yet. He point-/ed to a high peak of the mountains/ as the locality of all this riches, but/ he said that all who had attempted to/ visit it were driven by the tempests of/ wind and rain. I had to send back my/ mule from here and hire another, and/ to add to my troubles, the peon whom/ I had hired to carry my baggage to/ Mayobamba [sic; Moyobamba] deserted me during the/ night and I had another to hunt up in/ the morning. After paying an enor-/mous price for a mule I was rather ta-/ken abank when they led out an old,/ poor fellow, covered by a saddle still/ older, but as I could do no better, af-/ter a breakfast upon a cup of choco-/late and a couple of roasted plantains/ I mounted and followed my new peon/ who had gone with the baggage. We/ passed all day through a rough but/ rich country, seemingly as damp as/ the Amazon, and with cacao growing/ plentifully wild. Toward night we/ began to ascend again and stopped/ for the night at a tambo near a large/ elevated plain covered with coarse/ grass. The next morning began with/ rain and all day we went on the path/ running with water and the bushes at/ the side dripping. About noon the/ advance guard of the little army of/ the prefect of the province, who was/ also on his way through from Tara-/poto, began to overtake us, and all in/ a most miserable plight, peons with/ trunks and casea [sic; cases] of wine, with here/ and there a chicken strapped on over/all, or a parrot dripping and melan-/choly. One Indian boy followed cry-/ing, with a basket in which were/ three young Brazilian turkeys, one al-/ready dead and the others nearly so./ Another more happy in his burden/ carried a couple of the whistling/ ducks of the Amazon, that managed/ to keep comfortable through it all./

Several women were tramping along/ with the rest, one with a kettle anoth-/er with bundles strapped to their/ heads like the peons. Following these/ were the soldiers limping along with/ their guns or musical instruments/ hung over their shoulders. They were/ all barefooted, but they had been/ dressed in white pants, which were/ now the color of the clay of the/ path. We soon came to a tambo and/ the first arriving of the peons, caring/ little for the storm, built a fire and/ were roasting and eating plantains/ according to their custom, while the/ soldiers huddled around and wrung/ their clothes, though they looked as/ it if would take a month to dry them/ into soldiers again. The little Indian/ with the turkeys held them over the/ fire to try to warm them into life again/ and one of the women plucked the/ one already dead and prepared it for/ cooking. A lieutenant now came/ riding up and ordered the poor fel-/lows on. Soon after the prefect a/ large heavy bald headed man of fifty/ years came up, muffled up to the chin/ in ponchos, and closely followed by his secretary, slight young fellow of/ eighteen or twenty. I kept on with/ them passing the peons and soldiers,/ and stopping for the night with them/ in another tambo further on where we/ picketed the mules and prepared to/ pass the night. Those behind grad-/ually straggled in until fifty of us were/ under the little shed, thirty of them/ being soldiers with the band of music./

Fires were built all about us at/ which the soldiers and peons dried/ their clothes and roasted plantains,/ and then the roll was called and a/ sentinel placed,/ and I slept for once/ under the immediate protection of the/ Peruvian flag. The next morning af-/ter roll call the soldiers and peons/ were hurried off and then we follow-/ed over roads horrible from the recent/ rains. My mule spite of his age/ seemed to love good company and/ did his best to keep up with the rest,/ but as we were going down a steep/ hill the girth broke and threw me,/ gun, saddle and all over his head into/ the mud below. After mending the/ saddle I kept on alone, passing now/ and then a straggler, and crossing/ the mountain came out upon another/ open plain or prairie, crossed a swift/ stream that came up to the saddle/ and passed the night at a tambo on/ its banks with several who had been/ usable to keep up with the prefect's/ forced march./

Yesterday I arrived at this place/ passing through an open and beauty-/ful country. This seems to be a fine/ place for collecting birds and insects/ and I shall stay here a few days to/ take advantage of it./

Letter XLIX [Peninsular Courier and Family Visitant, 11(39), September 17, 1872]

FOREIGN CORRESPONDENCE

Number XLVIX

MOYOBAMBA, May 10, 1872.

A large part of the populations of/ Yurimaguas, Yquitos [sic; Iquitos], Pebas, and the/ other towns on the Amazon, are from/ this place, and as they tell you that/ they are sons of Moyobamba, their/ eyes glisten and they forget for a/ while the heat, and mosquitoes, and/ poor food, as they describe the spleen-/did climate, the rich plantains and yu-/ ca, the chica [sic; chicha] and bread and the dance/ in this place. It is to them the land/ to which they all intend to return/ when they have saved a little money./

Many gravely assured me that I/ would not pass there/ that no strang-/er ever passed Moyobamba, all be-/came captivated by the pretty girls,/ the climate, and the nightly balls and/ like lotos and aters [?lots of foreigners] forgot their homes/ and families, and were content to die/ there./

There is certainly for them reasons/ for all this enthusiasm. It would/ likely be difficult to find a better cli-/mate in the world; there are no ex-/tremes in heat or cold; the heavy/ rains of the Amazon are moderated,/ and much lessened in their passage of/ the mountains; the lands are rich and/ wherever trees are planted they are/ loaded with the finest of oranges and/ lemons and plantains. A little culti-/vation furnishes sufficient food and/ what now and then pays for the nec-/essary clothing, the rest of the time/ being given up to enjoyment./

Marriage is a thing hardly worth/ notice, and only a few old fogies/ trouble themselves about it, but the/ town is filled with young women, con-/sidered pretty who are not at all back-/ward in singing and dancing, and ren-/dering themselves agreeable, consid-/ering in their right and duty to choose/ their partners for the dance from the/ young men assembled./

As if to prove the proverb of the/ country twelve or fifteen Europeans,/ French, German, and Italians have/ stranded here and the most of them/ will likely die here. But with all,/ there is little that would lead a think-/ing man to stop here unless to make/ money to spend elsewhere. It is/ months either way before news of the/ world reaches it. A newspaper is/ almost unknown and there is not like-/ly a library of a hundred books in the/ whole place. Even the refined sen-

su-/alist would find the place uncongenial./ It is the paradise of those who know/ no better food than yucas and plan-/tains, and no better drink than chicha/ and aquardente [sic; aguardiente], and whose greatest/ pleasure is in dancing all night to the/ music made by drumming on a dry-/goods box, but for those of more re-/fined taste everything must be im-/ported at enormous cost./

Moyobamba, with the whole valley/ of the Mayo river, including the towns/ of Garapota [sic; Tarapoto] and Lamas, would be a/ most favorable place for European/ emigration, if it had some connection/ with the world, and this could be gain-/ed by building a railroad from Yurim-/aquas [sic; Yurimaguas] up the Huallaga river to its/ junction with the Mayo, and then up/ that river to Moyobamba, the valleys/ of these rivers being ready made/ grades through the mountains./

The Mayo, though a deep and quiet/ stream at Moyobamba, is broken with/ rapids below, where I heard the water/ at a mile's distance, dashing over the/ rocks, but the Moyobambinos have/ such confidence in modern engineer-/ing that the think the rocks can be/ blasted out and the river rendered vav-/igable./

The town is built upon a plain some/ two or three hundred feet above/ the river. The soil is clay and when/ it rains the streets are hard to pass,/ but first below this bed of clay are/ beds of sand and gravel,/ and when a/ gutter is once made though the clay,/ every rain cuts out the loose earth be-/low and carries it into the river. The/ town is crossed in several places by/ great ravines, sixty and eighty feet/ broad and as many deep, and houses/ and streets are continually caving in./ The houses are built of mud, built up/ in layers as in Tarapota [sic; Tarapoto], and in the/ centre of the town they stand in toler-/able regular streets, and are covered/ with tile roofs, but the town soon/ fades out around the border in crook-/ed streets and straw-covered sheds./ Glass is unknown and among the/ poorer habitations there is but one/ opening to serve as door and window./ The earth is the universal floor and/ even when the houses are of two stor-/ies, the second floor is earth also, sup-/ported by canes and timbers./

My host, Señor Da Sousá [sic], is build-/ing a house, and I have an opportuni-/ty of seeing the *modus operandi*. The/ old custom of employing Indian peons/ forced to labor is no longer practica-/ble, as there is none of that class left/ here, and those of mixed blood know/ their rights too well to work in that/ way. All are too independent and too/ lazy to work for hire, and the only re-/source left those who wish work done/ is to ally themselves with a large

num-/ber of the lower trash by acting as/ godfather at the baptism of their child-/ren. Then when they wish labor/ done they call upon their new made/ relations to assist. Señor Da Sousá's/ house has been full for several days of/ compadres and comadres, of all shades/ of color, with the consequent small/ fry. The men working lustily though/ clumsily at the building while the wo-/men assist the Señöra [sic] in cooking and/ making chicha. They would scorn/ the offer of regular wages, but the em-/ployer is expected to make presents/ and do favors, and he may consider/ himself fortunate if he gets off with/ what would have been fair pay./

There are very few pure Indians,/ and as from the inevitable laws that/ govern in such matters the white/ blood must always predominate, a few/ generations more will likely leave few/ traces of Indian blood in Moyobam-/ba. The Indian race of South Amer-/ica is as fated as that at the North./ This wholesale system of whitewash-/ing is as sure destruction here as war/ and disease is at home, though it may/ be a few years longer in doing its/ work./

There are no boot-stores nor shoe-/makers in Moyobamba. Women with/ silk dresses and gold ornaments go to/ church and shopping about the streets/barefooted, and young men with smart/ broadcloth jackets and pants, and of-/ten with a cane strut about in the/ same primitive style./

The principal business is hat mak-/ing. These are made from the young/ leaves of a fan palm that are pulled/ into strips with the fingers, and after-/wards boiled and dried, when they/ are ready for braiding. The braiding/ is done by both sexes, and in the/ morning and evening one can see/ persons seated at almost any door, on/ the ground or on low stools, engaged/ in it. The ordinary hats are now/ worth a dollar apiece here and/ take four or five days in the braiding./ A few of extra fineness are made that/ take much more labor and bring ex-/traordinary prices. The hats are sold/ at night, perhaps because they think/ that by the dim lights in use any de-/fects will be more likely to be over-/looked. Several hundred are sold/ every night, each person bringing his/ own manufacture and passing up and/ down the street until he has disposed/ of it. The hats are put up in bundles/ by the buyers, and sent on men's backs/ to Balsa, Puerto [sic; Balsapuerto], and from there by/ canoe to Yurimaguas where they take/ the steamer to Brazil, their place of/ sale./

I had heard much of the balls of/ Moyobamba, and finally prevailed up-/on Señor Da Sousá [sic] to accompany me/ to one. They had already been danc-/ing for a day and a night, and several of/ the guests were sleeping upon a couple/ of cow skins, at one

end of the room./ The ball was in honor of a young/ couple entering their new house, and/ the damp walls lighted by one sickly/ candle, and the mouldy smell of the/ room promised anything but a pleas-/ ant time, but with plenty of chicha/ and aquardente [sic; aguardiente], they made the best of/ it and the band, composed of a fiddle/ and banjo, and a large dry goods box,/ struck up, while the women sang in a/ high shrill key some love song, and/ two barefooted couples made the dust/ fly. Toward the latter end of the/ stanza the women and boys sung/ louder and shriller, the fiddler did his/ best, the two boys at the dry-goods/ box pounded themselves red in the/ face, while the dancers "quick and/ quicker flew," and just as all had/ reached the very acme of their pow-/ers the song ceased, the dancers stood/ still, while the boys at the dry-goods/ box kept up a tattoo as a refrain./ After a change of partners the music/ and singing commenced again, going/ on as before increasing the noise and/ enthusiasm until it seemed to have/ almost reached the splitting point and/ then as suddenly subsiding. As in all/ the dancing I have seen in Peru, the/ handkerchief is a most necessary ar-/ticle with both parties, and upon its/ proper use depends much of the/ grace of the dancer. With it the/ young man beckons on his partner and/ now floats it around her head as they/ whirl about each other and/ now stoops as if he would swrep [sic] the/ dust from her bare feet, she sometimes/ using her handkerchief as a shield to/ keep off his advances, and sometimes/ urging him on to greater endeavors./ The songs sung are generally love dit-/tties [sic], often of mixed Spanish and In-/ca, with frequent extempore allusions/ to the parties present. After with-/standing several most pressing invita-/tions from some of the young ladies/ present to dance we made our way/ into the fresh air, leaving them at their dusty sport./

With the general lack of marriage/ and morality, as we are accustomed/ to look upon it, there is at large at-/tendance at mass, the church being/ nearly filled with kneeling women/ while a hundred or two boys and men/ stand near the door, kneeling and/ crossing themselves at the more sol-/emn parts of the service. The priest/ is accompanied as he chants the serv-/ice by the brass band and the heavy/ clang of the drums, and cymbals tells/ all over the town that the service is/ going on./

I was astonished and shock-/ed a few days ago when pass-/ing along the street by meeting a rude/ litter made of a piece of cloth stretch-/ed between two sticks, with the half/ covered corpse of a small boy upon it,/ the feet and head protruding from the/ dirty cloths in which the body was/ wrapped. The bearers

were two rag-/ged boys who had probably been/ playmates of him they were bearing,/ while a third with a rude spade to dig/ the grave followed. As they came/ near they dropped the litter in the/ middle of the street to rest apparent-/ly with no more feeling than if they/ were carrying a dead pig, and the/ people passing seem to look upon the/ matter in the same light. This heart-/lessness in regard to the dead results/ in a great measure likely from the/ lack of marriage, and with it the fam-/ily ties that makes death so terrible/ among all classes with us,/

The mother has no legal right to/ compel the father to support his chil-/dren, and the result is that the poor/ women have all the supporting to do,/ and looking upon the children at so/ much cost and trouble they wish they/ were dead, as I have heard some/ women frankly confess. The children/ are brought up with insufficient food,/ and in complete ignorance, and when/ they get old enough to help their/ mothers, instead of doing so they call/ them hard names, and make them/ drudge harder than ever. I often saw/ women carrying heavy loads of plan-/tains upon their heads from the cha-/cras about the town and heavy jars of/ water from the river, nearly a mile off./ Woman's life is none of the happiest/ even in Moyobamba where free love/ is as settled a fact as the most enthu-/siastic could wish.

J. B. STEERE.

Letter L [Peninsular Courier and Family Visitant, 11(42), October 18, 1872]

FOREIGN CORRESPONDENCE

Number L

CHACHAPOYAS, June 26, 1872.

I spent three weeks very pleasantly/ at Moyobamba; the most of the time/ in the woods, following the paths made/ by the wood cutters, and shooting/ many bright-colored birds that never/ make their way to the moister and/ more heavily timbered lands upon the/ Amazon. I also visited the warm/ springs, the water of which is about/ blood heat, and large quantities of gas/ are continually bubbling up, showing/ that those forces that show themselves/ in volcanoes and earthquakes farther/ west are but sleeping here. I was/ also fortunate enough to see an elec-/tion./

The President and Vice Presidents/ of the Republic, as also members of Congress, are chosen by boards

of/ electors who are supposed to get their/ election from the people. The board/ of electors for the province of which/ Moyobamba is the capital, comprising/ some twenty or thirty members, had/ assembled to cast their vote for Pre-/sident and Vice Presidents. The elec-/tion was held in the plaza or public/ square, but in place of one board of/ electors and one polling box there were/ as many as three full boards, each/ with its corner of the plaza, and each/ claiming the be the genuine board, and/ perhaps with equal justice. Each can-/didate for the presidency had his dele-/gation of electors, and each was elected/ unanimously from the province of/ Moyobamba. The returns go to Lima,/ and the candidate who is successful in/ the revolution that invariably takes/ place with a change of rulers here,/ will recognize the boards that elected/ him as the legitimate ones. The mem-/bers of the Peruvian Assembly or Con-/gress are elected by these same boards/ of electors, and their claim to a seat/ is likely founded on pretty much the/ same grounds as that of the President,/ and the Assembly cannot be expected/ to have much independence, they hold-/ing their seats by little more than the/ appointment of the President. As/ near as I can discover, the PEOPLE,/ who are supposed to have something/ to say in regard to how they shall be/ governed in republics, have very little/ to do with it in Peru./

Just before I came away there was/ a procession in honor of St. [word missing, San Isidro Labrador], the/ patron saint of farmers. The saint/ himself was carried at the head of the/ shoulders of four men. He was repre-/sented as a pleasant looking old farm-/er with a broad-brimmed, palm-leaf/ hat, and holding a plow – the only one/ in the department – that was drawn/ by a yoke of oxen. The people told/ me that unless they held this feast/ their planting would not grow; but it/ seemed to me that if they should fol-/ low their saint's example and hold the/ plow over their fields, it would be a/ better security for good crops than/ the procession./

When I was ready to go on, the/ alcalde with whom I got acquainted/ procured me a mule and a peon to/ carry my luggage, and we set out for/ Rioja, where we arrived in the evening/ of the same day, having to be ferried/ across a branch of the river Mayo in/ a large canoe. Much of the way the/ road, which led through a low, rich/ country covered with miriti palm, was/ made of logs, laid down in the same/ way as in the corduroy roads for which/ our own State is so famous./

I wished to pass on from Rioja im-/mediately, but there was a great feast/ in progress, and the governor, a weak,/ easy fellow, never had transportation/

ready though always promising. Find-/ing it almost impossible to move under/ the circumstance, I settled down/ quietly at the house of Senor Arana [sic],/ for whom I had a letter of introduc-/tion, and went to hunting until such/ time as the feast should be over. Rioja/ is a town of five or six thousand in-/habitants, but is dependent upon Mo-/yobamba for its trade, sending its hats/ there for sale, or receiving goods that/ have come by way of the Amazon./ The people, like the Moyobambinos,/ are a badly mixed race, given to danc-/ing and feasting./.

After twelve or fifteen days of wait-/ing for transportation I got tired and,/ sending on my heaviest baggage, hired a peon to carry my bed and pro-/visions, and started on foot, intending/ to hunt upon the way. The first day's/ tramp was through the valley, and we/ passed the night at a tambo, just at/ the foot of the mountains. The next/ morning we begun climbing up the/ steep but heavily timbered mountain/ side through what the peons call the/ cahones [sic; cajones] or boxes. Those seem to have/ been formed from the common mule/ and foot paths, the grass and roots/being worn away in this manner, and/ then every rain storm making the hol-/low path the track for a little torrent/ that continually cuts it deeper, so that/ one travels now much of the time in a/ deep, narrow trench from eight to/ twelve feet below the general surface./ In many places trees have fallen across/ and vines grown from side to side, so/ that one is traveling in a sort of tun-/nel and in everlasting twilight. I soon/ left my peon far behind, and by the/ middle of the afternoon had reached/ the top of the first range of hills. Here/ there was a little open spot of ground/ called the ventana or window, from/ which there is a splendid prospect of/ the great valley below. Rioja was in/ sight, and I could see the location of/ Moyobamba. Outside a narrow belt/ of chacras immediately about the/ towns, the whole country is a wilder-/ness which, if properly cultivated,/ would support millions in comfort./

I had killed two or three birds in/ coming up, and having everything/ ready in my pockets, I made a table/ of a large rock, and skinned and pre-/served them while enjoying the pros-/pect and waiting for my peon. He/ finally came panting up, and we walked/ on two or three miles father, and/ camped beside a mountain brook in/ the shelter of a tree, for lack of a/ tambo. I shot a beautiful, spotted/ heron from the brook and skinned/ him, while the peon was building a/ fire and cooking our supper. We for-/tunately passed the night without/ rain, and the next morning, after a/ breakfast of the heron roasted, we/ tramped on, soon coming out to a/ small but rapid

stream, up which the/ path followed. I here found two or/ three species of fuchsias, the trees and/ bushes being in full bloom and often/ hanging directly over the path. There/ were also great quantities of that cur/ious, yellow, slipper-shaped flower/ common in the hot houses under the/ name of calceolaria. In addition to/ these old friends I found a small flow-/ered but sweet scented geranium, and/ many other flowers that I did not/ know. These flowers do not grow/ upon the plains below, but find their/ home upon these cool, moist hills, above/ the heat and below the frost./

The valley of the creek was too/ narrow in some places to allow of the/ path which then wound along the/ mountain side above, there being/ often a sheer precipice down to the/ creek on one side, of several hundred/ feet. Seeing the weeds torn a little/ at the side of the path in one of these/ places, I looked down and saw the/ skin of an ox spread upon the/ rocks in the bed of the stream below./ The poor fellow had made a misstep/ and gone down over a hundred feet./ We met here a small drove of cattle/ from Chachapoyas bound to Moyo-/bamba, a trip of eight or nine days./

The beef cattle of Moyobamba and/ Rioja, as well as the cattle that turn/ the cane mills, are all brought over/ this road, there being a lack of cleared/ ground in those places for pasturage,/ and too many insect enemies to allow/ of raising cattle./

Toward night we made our way/ down to a little open valley upon the/ stream. The mountains shut it in on/ every side, and it well deserved its/ name of Udj Ho [sic; Uscho ou Uschco], or the hole. Here/ stood a tambo, like the others as plain/ as a Greek temple, consisting solely/ of six posts set in the ground and sup-/porting a roof of palm leaves./

I had heard of some rare and beau-/tiful birds that were found near here,/ and concluded to stop a few days to/ hunt them. The evening was warm/ enough to be pleasant, and there were/ a few mosquitoes, though not of the/ rabid Brazilian kind, but similar to/ those in the States. But toward morn-/ing I was awakened with the cold, and/ though I piled on all my blankets and/ clothing I could not sleep again, though/ my peon slept beside me on his sheep/ skin, covered only with his poncho./ It seemed to grow colder until morn-/ing broke, and then I was glad enough/ to be able to take my gun and go into/ the woods hunting to warm my blood./ I followed up the rocky bed of the/ stream that was nearly dry at this/ season, and soon heard the hoarse/ screaming of the bird I was in search/ of. Taking off my shoes and creeping/ over the rocks in my stockings, I soon/ had him in range and fired. Though/ surely hit, he flew off and fell in the/ thick woods where I could not find/

him; but I had better luck next time,/ and putting a shot through one's neck,/ he fell upon the rocks in the bed of/ the stream. I do not know what to/ call them in English; perhaps cock/ of the rocks would do for a name./ The Brazilians who have them in the/ mountains upon the rio Negro call/ them "Gallo da Sierra [sic; galo-da-serra]," or cock of/ the mountain, but the Indians here/ call them "Cocho pishko," or pig/ birds¹⁰¹. They are nearly as large as/ our pheasant, and likely belong to the/ same family of birds. The male is a/ bright orange color, with wings and/ tail mottled and black. The legs,/ beak and eyes are yellow, and there/ is a crest of feathers upon the head,/ in which he can conceal the beak at/ his pleasure. Their note is a hoarse/ squeal, much like that of a pig, and/ from this they get their name. The/ female is reddish brown, and has little/ of the beauty of her lordly mate./

As I went up the stream the moun-/tains came in on both sides, and on/ one there was a sheer perpendicular/ cliff of several hundred feet in height./ I soon came to a fall of twenty or/ thirty feet, but hearing another bird/ screaming above, I crawled up it and/ went on. In one place where the cliff/ jutted over, many humming birds were/ building their nests against the rock./ An agouti was drinking from a pool,/ and several Brazilian turkeys were/ leading their young about. These/ animals showed little fear, the place/being seldom or never visited, the/ people never leaving the beaten track./ After killing two of the pig birds, and/ a turkey for our supper, I returned to/ the tambo and spent the rest of the/ day in skinning and preserving my/ treasures. After another cold night/ I again followed up the bed of the/ stream, and again brought back some/ of the orange colored birds and a/ hawk that I shot while he was picking/ a pigeon. I added his skin to my/ collection, and his body and his game/ we added to our larder. Several/ droves of dogs passed along the path/ that day on their way to Lamas and/ Tarapoto. This seems to be a regular/ business, Indians of Tarapoto going/ to Chachapoyas and even farther, and/ buying and stealing a large number of/ dogs; and tying them two and two,/ with a stick between them to keep/ them from fighting, they drive them/ home, often being months on the trip./ From lack of meat or for some other/ reason, it is very difficult to rear dogs/ there, and these dogs of the mountains/ sell at a profit. After they had passed,/ my peon

accused them of stealing a/ part of our provisions; but whether/ they had done so, or whether he had/ sold to them, I shall never know,/ though I strongly suspect the latter,/ for though he carried a most lugubri-/ous face, I found he was a rascal./

After the third night at Udjko [Uscho or Uschco], we/ moved on up the valley again, and/ stopped the next night in another open/ tambo with several dog herds as com-/panions. They had picked up dogs/ of every size and breed. There were/ the lean, rough Indian dogs that had/ always fared with kicks, and others/ whose mild eyes showed that they had/ been accustomed to gentler treatment./ They were unyoked and fed, their/ supper consisting of a few grains of/ green corn, and their breakfast was of/ the same. After another cold night/ we left our friends and their dogs to/ make their way down the valley, while/ we kept on always ascending./

The woods were now made up in a/ great measure of feathery-crowned/ tree ferns, while the ground beneath/ was one mass of smaller species. At/ night we had nearly passed the range/ of trees, the vegetation being puna/ grass and bushes. We arrived, in a/ cold, soaking rain, at the stone tambo/ of Almirante, just at the foot of a high/ range of grass-covered mountains./ The tambo had been thatched with/ puna grass, but this had been broken/ through in several places, and the/ water was leaking through and soak-/ing the ground inside so that we had/ trouble to find dry places for our beds./ Just at night some herdsmen came/ down the mountains with cattle for/ Moyobamba, and we had to share the dry places with them. With a few/ dead bushes we made a fire and cooked/ a little supper, and then went to sleep./ The next morning it was still raining,/ and my peon did not wish to stir, while/ the herdsmen advised me to to at-/tempt the crossing that day; but I/ thought we could not well pass a more/ uncomfortable time than in the leaky/ tambo, so I started, telling my peon/ to follow./

The path, down which a little tor-/rent was now pouring, led right up for/ several miles through hills covered/ with grass and bushy ferns, and I/ finally reached a ridge of bare rock,/ the summit of the range. A high wind/ was blowing directly across this, bring-/ing with it sleet and snow. Wet as I/ was, it seemed as if the wind would/ cut through me, and I don't think I/ ever suffered more at home with the/ thermometer ten and twelve degrees/ below zero than I did here with it/ hardly down to the freezing point./ This place is called by the Indians/ "Pishko wainuna,"— the place where/ the birds die, — and they fear it very/ much, as they well may, for several/ die here every year. They come up/ from Moyobamba and Tarapoto with/ their light

¹⁰¹ Genus *Rupicola* (Aves, Passeriformes, Cotingidae). *Rupicola rupicola* (Linnaeus, 1776), the "galo-da-serra" occurs in extreme southeastern Colombia, southern Venezuela, the Guianas and the montainous regions of northern Brazil. *Rupicola peruvianus* (Latham, 1796), the "gallito de las rocas, tunki or tunqui" is the Peruvian species and national bird.

clothing, and getting chilled/ in crossing, sit down and die. I ran/ to keep warm over the worst part, and/ hurrying down the other side of the/ mountain, in a couple of hours I reached/ a valley and a stream, and crossing/ this on a rude bridge, I came to a well/ made tambo, which was full of people/ who were waiting for a more favorable/ day before attempting to cross the/ summit. Borrowing a machete of one/ of them, I cut a lot of dead limbs, and/ making a large fire, dried my clothes/ while anxiously waiting for my peon./ I waited until dusk, and had just con-/cluded to pass the night without my/ supper or bed when he came up. In a/ niche in the stone wall was a little/ cross, covered with flowers, the offer-/ings of this simple people; and I think/ if I had been of their faith, I should/ have done something of the kind my-/self, in gratitude for my safe arrival./ My feet were badly cut by my boots,/ from walking so much in the water,/ and it was with considerable trouble, that I walked the next day to the little/ village of "Molino pampa," [Molinopampa] or Taulia,/ and brought my tramp to a close./

J. B. STEERE

Letter LI [Peninsular Courier and Family Visitant, 11(43), October 25, 1872]

FOREIGN CORRESPONDENCE

Number LI

CHACHAPOYAS¹⁰², June 26, 1872.

Upon examining our haversack of/ provisions in the morning before start-/ing for Taulia, I found we had but one/ small cake of bread and about half a/ pound of meat left, and we had already/ been on short allowance for two days;/ but giving the larger share of what/ was left to the peon, as he had the/ load to carry, I set out ahead to reach/ the village. The distance is ten or/ twelve miles, and lame as I was it/ seemed much farther; but about the/ middle of the afternoon I arrived at/ the first few houses. Feeling ready/ to eat almost anything, I entered the/ first house and asked an old woman/ for something to eat; but my expecta-/tions were somewhat dampened by/ the brief reply: "No hay," – there is/ nothing. I thought that perhaps she/ was afraid I had no money,

and offer-/ed her silver and again asked if there/ was no green corn, potatoes, eggs -/ anything to stay hunger; but the an-/swer to all was the same - "no hay."/ Entering another house, I met with/ the same success, and also in the third./ Despairing of getting anything to eat/ in this way, I then inquired for the/ governor, who I knew was compelled/ to furnish strangers with something to/ eat; but found that he was in the other/ village, a mile distant, and all the way/ up a steep hill. With rather harsh/ opinion of the hospitality of the Tau-/lians, I began to climb to the other/ village, stopping to rest from faintness/ every few rods. Upon finally reach-/ing the top, I found the people dressed/ in their holiday best and marching/ around with their saints, the process-/sion being led by a man who scattered/ flowers along the path./

Upon inquiring for the governor,/ they directed me to a house, where I/ found him with the other notables of/ the place seated about a table that had/ several great plates of boiled mutton/ and cabbage upon it, while heaped up/ in a great ridge along the center were/ the yucas and boiled green corn that/ served for bread. The governor rose/ and invited me to a seat at the table,/ and I did not wait for a second invi-/tation but went at the mutton and/ green corn in such earnest that I am/ afraid some of the rest had to go/ hungry. Soon after this the priest,/ hearing there was a stranger in town/ and, likely, hearing also that I was/ hungry, sent me an invitation to take/ supper, and I was still able to do/ justice to the eggs and green corn and/ potatoes he set before me. After this/ I visited the house where preparations/ were going on for the ball. The night/ was chilly, and a fire had been built/ in one end of the room, while the/ other was cleared for dancing, the/ band taking their place upon the table./ The people seemed to be in a hurry/ to get to dancing, and after the/ chicha had been passed around two or/ three times and the bottle of aquar-/dente [sic] as many, the band struck up and/ they went at it in good earnest. The/ tunes played and the style of dancing/ were the same as I had seen at Moyo-/bamba, but they danced much faster,/ there appearing to be a wild race part/ of the time between the dancers and/ the musicians./

The Taulians are nearly pure Indi-/ans, and are likely of the Yuca [sic; Inca] stock./ They are short but stout and ruddy,/ the rich blood showing itself even/ through their brown skins. The wo-/men were dressed in blue dresses of/ coarse wool of their own manufacture,/ with scarfs or blankets of bright colors/ over their shoulders and fastened in/ front with large silver skewers. The/ men were dressed in pants of the same/ blue homespun, with jackets or with/ part col-

¹⁰² Chachapoyas – Department of Amazonas. The name derives from chachapoyacuno – "cloud forest". Elevation 2335 meters above sea level.

ored ponchos, and were all/ barefooted, even to the governor./

After watching this wild dance for/ a couple of hours, and being flattered/ with invitations to dance from several/ nut-brown beauties, I was glad enough/ to go back to the house of the gov-/ernor and go to sleep. The governor/ could not find me beasts to go on with/ in the morning, so I had one day to/ rest and to examine the customs of the/ Taulians. They nearly all possess a/ few mules, and they do the carrying/ trade between Moyobamba and Cha-/chapoyas. The lower village is built/ upon a level valley of several hundred/ acres. This is partly under cultiva-/tion, there being many little fields of/ corn that is planted in rows and some-/times hoed. Corn is almost the only/ thing raised, but even this has been/ cut with frost and much damaged this/ year. Potatoes are said to have been/ raised in great plenty a few years ago,/ but it has grown too frosty for them./

Every family has a few sheep, and/ when wool is wanted one is caught/ and sheared. The women spin it while/ traveling along the road or tending/ their flocks, the implements used be-/ing a stick of two feet in length to/ which the wool is tied, the distaff of/ the ancients. This is held under one/ arm while the wool is twisted by twirl-/ing a spindle between the fingers./ After the yarn is spun in this classic/ style, the housewife arranges the piece/ for weaving. There is no loom, a few/ smooth sticks answering all purposes,/ and she takes her work and, walking/ out to some sunshiny spot, she fastens/ one end of the piece to a tree or a post,/ while the other is recurred to a stout/ strap that passes about her waist. A/ smooth rod with the yarn wound upon/ it serves for a shuttle, and the yarn is/ pounded down to its place by a long,/ heavy sword-like blade of chunta wood./ Thus seated upon the grass and brac-/ing back to hold her work taut, the/ woman passes the day, and when night/ comes rolls up her work and walks/ home to boil the pot of corn that forms/ the simple supper of her family./

The houses are a mixture of stones/ and mud and sticks, and are covered/ with thatches of the puna grass that/ is said to be very durable. The one/ opening that generally serves for both/ door and window, is turned away from/ the road as if to show that they are/ not given to hospitality./

The next morning the governor had/ provided me a mule for my baggage/ and a horse for myself, with a short,/ dumpy boy of sixteen or eighteen for/ a guide, and I set out for Chachapoy-/as. The road, or path rather, led down/ the stream, and for the first few miles/ through a pass that the stream had cut/ through between the mountains, on/ each side rose

up perpendicular cliffs/ of limestone for more than a thousand/ feet. After descending rapidly for two/ or three hours, the valley began to/ widen and to be cultivated, and I was/ soon again in the land of the orange/ and plantain. But the little thread of/ green and cultivated lands along the/ stream was lost among the great/ mountains that rose on each side, bar-/ren and desolate not from cold as those/ that I had passed, but from heat and/ drouth [sic], for here and there a gigantic/ organ cactus lifted its bare arms, or a/ century plant sent its flower stalk/ twenty or thirty feet in the air./

Taulia is the boundary between the/ rainy and the dry belts; on the one/ side are palms and tree ferns and deep,/ thick forests; on the other barren/ plains and mountains at most covered/ here and there with a few bushes./

After riding several miles down the/ valley through magnificent scenery,/ the road often cut out of the/ almost perpendicular side of the moun-/tain, with the stream – now a river –/ roaring below, we turned to the left/ and crossed the stream on a rude/ stone bridge, and after following the/ valley a few miles farther, now again/ too narrow and rough for cultivation,/ we began climbing the mountains/ again, and after three hours' hard/ work we had reached the great bar-/ren broken plain upon which Chacha-/poyas is built, and a few minutes after-/ward rode into the city./

I was very kindly received by Mr./ Wurthemann, a Californian, who re-/ceived his education as civil engineer/ in France, and was employed by the government upon its public works in/ this place, grading the streets, build-/ing a college, etc. He took me with/ him the morning after my arrival to/ visit his works. In the grading of the/ street upon which he was at work,/ some of the houses had been hurled/ two or three feet, while others had/ been left in the air. I was considerably/ amused at the philosophical aspect of/ some of the people who sat in their/ doorway and looked down four or/ five feet into the street, as if they did/ not know what modern improvements/ would lead to next. The implements/ used by the workmen were also well/ worth notice. A short, heavy iron/ bar, sharpened at one end, serves for/ a pick axe, while the fingers are in-/variably used for shovels. Three men/ in one place were dragging dirt in a/ cow skin that served for a sledge,/ while several others were carrying/ litters made of the same by swinging/ them between two poles; but the ordi-/nary method of carrying dirt and/ stones was in baskets or sacks of raw-/hide carried upon the back by a strap. Mr. Wurthemann brought spades and/ shovels and wheel barrows from Lima,/ but they did not like them, and

soon/ broke them to pieces and returned to/ their bars and cow-skin sacks./

The workmen are Indians drafted/ from the neighboring villages. They/ serve two weeks and get two reals –/ twenty cents – per day. When their/ two weeks are passed they return/ home, and a new squad is sent on./ They were a strange looking set,/ dressed in ragged blue pants and/ ponchos, and all shod with cowhide/ sandals, called Lyanques [sic; llanque], pronounced/ almost exactly as our national appel-/ation. Each had his bag of coca and/ a little box of cane or horn for hold-/ing quick lime, with which they season/ each mouthful./

Chachapoyas has perhaps eight/ thousand inhabitants, and as it is near-/er the capital than the other towns I/ have visited, it has a few paved streets/ and some little appearance of taste/ and refinement. Why it was ever/ built upon this cold, barren plain, it is/ hard to imagine. It is almost entirely/ supplied with provisions from the low-/er and warmer valleys about it. The/ site of the city is about nine thousand/ feet above the sea, and the nights are/ uncomfortably cool, and accustomed/ as I am to the climate of the Amazon,/ the air does not get warmed up until/ nearly noon so as to feel comfortable./ The air is so thin that with the least/ exercise one gets out of breath and/ feels as if about to suffocate. The/ lungs of the natives are enormously/ enlarged to provide for this./

I am beginning to learn something/ of the government of Peru. Not only/ are the prefects sub-prefects and gov-/ernors appointed from Lima, but the/ salaries of all the officers, of the priests/ and the school masters, and all the/ money for building churches, school/ houses and even for paving streets,/ comes from the same place. These/ interior towns are literally supported/ by the government. With no exports/ and with large importation of foreign/goods, they depend upon the monthly/ contingent from Lima, and when it is/ delayed they complain of their gov-/ernment. If the guano, from which/ the government revenues are de-/rived, should fall, I think Peru would/ fall to pieces of its own weight. The/ interior towns would be thrown upon/ their own resources, and without pub-/lic feeling enough to build a mud/ church or school houses, they would/ soon relapse into the barbarism from/ which they have sprung./

Cock fighting is one of the principal/ amusements here, every Sunday after-/noon being devoted to it. As I wished/ to see Chachapoyas life in all its/ phases, I prevailed upon Mr. Wurthe-/mann to accompany me to the cock/ pit. There were already one or two/ hundred people in the court yard where/ the games took place, and twenty or/ thirty cocks were

tied around the/ walls to stakes, and were all crowing/ at the top of their voices. When we/ entered they were raising their bets/ upon the first game, the sub-prefect of/ the city betting heaviest, while my/ friend, the priest from Taulia, put/ down his four reals, as he said not to/ make money but to encourage the/ game. After the bets were all ar-/ranged, sword-shaped knives four/ inches in length were brought out and/ carefully sharpened and bound to the/ legs of the cocks, and they were put/ front to front in the pit, while their/ owners backed out and let them fight./ One funny, toothless old fellow who/ had bet upon the cock that seemed to/ be loosing would cry out at each blow/ it received from the other, "Ah! That/ goes to my heart!" but he not long [sic] to/ wait, as his favorite soon turned over,/ dead, while the other was carried out/ and bled to death a few minutes after-/ward. At the sight of blood the bet-/ting on the next game became brisker,/ and another pair, armed with the same/ deadly knives, were soon ready, and/ one of them was killed almost as soon./ An Indian near me had bet the only/ four reals he had upon this game and/ won, and as he received his money/ he rubbed his hands and cried out:/ "Bring on some more cocks!" After/ watching two or three more games, in/ all of which one or both cocks were/killed, I went home satisfied./

I have been much amused in visit-/ing the market, which is held every/ morning on one corner of the plaza./ Here are generally a hundred or more/ women seated on the ground, each/ with a little heap of potatoes, a few/ eggs; a few cakes of chocolate, a little/ pile of salt, another of sugar, a few/ peppers, little bits of lard on leaves,/ cakes of green corn, etc., all having/ about the same variety, while among/ them are swarming the buyers. What/ adds to the difficulty and animation of/ the scene is the custom of marrying/ their merchandise, as they name it./ If some article is scarce in the market/ and some other in abundance, if one/ wishes to buy the scarce article, he is/ told that it is married with the other,/ and he must buy both to get the one./ Then having an article he does not/ want, he must find some one else and/ make another trade. Eggs are always/ married, and to get a dozen one must/ buy as many cakes of chocolate or the/ same value of sugar./

There is little mixture between the/ Whites and Indians here, there likely/ having been some tribal law against it/ at first, the feeling against it certainly/ coming from the Indians and not the/ Whites. The Indians are short in/ stature and ugly, often with goitres/ and other deformities found in cool/ and shaded mountain valleys./

Letter LII [Peninsular Courier and Family Visitant, 11(44), November 1, 1872]

FOREIGN CORRESPONDENCE

Number LII.

CHACHAPOYAS, July 6, 1872.

After I had been here a few days,/ Mr. Wurthemann proposed a trip to/ Quillip [sic; Kuélap], two days' ride up the river/ Utcubamba. We had as a companion/ a little, boyish-looking Peruvian doc-/tor, who, like all the rest, draws his/ salary from Lima. He speaks a littlle/ English, and thought to practice it -/ not his medicine - upon me; but I/ came to the conclusion that I spoke/ his language better that [sic] he did mine,/ so he generally addressed me in poor/ English and I answered in bad Span-/ish. He was mounted on an old sorrel/ mare that was little but skin and bones,/ and he had an immense pair of saddle/ bags, in which he carried his bed and/ candles and provisions for the journey,/ and these stood out like wings on each/ side, so that altogether he cut a most/ comical figure. I was not much bet-/ter mounted, my horse being such as/ the soldiers could find in the streets,/ they unhorsing the first mounted man/ they found, and sending me his horse/ by the order of the prefect. A soldier/ followed us, driving a mule upon which/ was the rest of our baggage and some/ iron bars to dig with, should we con-/clude to make any excavations./

We descended from Chachapoyas/ to the river Utcubamba, and then fol-/lowed up this stream, sometimes in/ the valley among patches of sugar/ cane and plantains, and sometimes/ along the mountain side above. We/ arrived after night at the house of an/ old man with whom Mr. Wurthemann/ was acquainted, using one of the doc-/tor's candles for the last half mile to/ keep to road. We found the old man/ - one hundred and four years of age/ - in a little shed besides his house that/ served for a kitchen, patting a couple/ of days that lay at his feet. His half-/ breed wife hurried about to make us a/ bowl of hot soup, while the old man/ talked of the good old times of Span-/ish rule. He had lived for the last/ sixty years where we found him, and/ was still able to cultivate his little/ chacra. The woman found places for/ us to spread our beds, and we slept/ until morning, with no greater novelty/ than plenty of fleas./

After another bowl of soup and/ some green corn, we again set out up/ the river, and soon saw remains of/ ancient towers on the almost inacces-/sible

mountainsides above us, these generally consisting of half circular/ walls of stone that seem to be the/ foundations of superstructures of mud/ or straw that have long ago been de-/stroyed. These walls generally rise/ in tiers on [sic; one] above another, and though/ seemingly better fitted for eagle's nests/ than for human dwellings, they must/ have contained a numerous population./ To these aeries [sic] the farmers of the/ plain must have climbed every night/ after their toll to rest secure from their/ enemies. The necessity for building/ in such places shows a state of war/ and insecurity of life, compared with/ which the present state of the country/ is happy. Upon the other side of the/ river we could now see long parallel/ ridges running along the face of the/ mountain, and evidently the remains/ of ancient cultivation, either boundary/ lines between fields, or made to facili-/tate irrigation./

As we now reached a higher and/ cooler climate, the sides of the moun-/tain began to be cultivated, and we/ saw many patches of wheat and bar-/ley, the former nearly ripe. These/ crops are sown during the rainy sea-/son, which is generally sufficient to/ bring them to perfection./

We arrived that afternoon at a/ hacienda, at the foot of the mountain/ upon which was the fortress we wished/ to visit. The owner was expecting us,/ and had everything prepared for visit-/ing it next morning. That night I/ first experienced the garapatos [sic; garrapatas], though/ I had often heard of them. They ap-/pear much like wood ticks, though/ they not adhere to the body. One/ hardly feels when they bite, but/ the wounds inflame and often do not/ heal for several weeks. In the morn-/ing we found ourselves well bitten,/ and several garapatos in our beds too/ full of blood to move. After breakfast/ we rode up the mountain toward the/ fortress. I could not imagine when/ in the valley below for what purpose/ the fortress had been build [sic] at such an/ elevation and apparently inaccessible/ place; but upon reaching the top we/ found large extents of country not too/ rough for cultivation, there now being/ many patches of barley and wheat. I/ here saw plowing going on, the plow/ being a crooked stick sharpened at/ one end, and with another fastened to/ it that served as a beam, and was/ fastened at the other end to a yoke/ that was bound to the horns of the/ cattle. The plowman caught the end/ of the stick that served for a handle,/ while the other goaded on the oxen,/ and they went scratching across the/ field, making but little more impress-/sion than the tooth of a harrow; but/ by continually going over the ground,/ plowing it six or eight times, they get/ the top soil in pretty good order,/ though the ground is likely never/ stirred to more than a depth of two/

inches. Further on we found quite a/ village of Indians, belonging to the/ estates and perhaps descendants of/ the fortress builders. Still going on/ and up, we came in sight of the fort-/ress, covered at the top with low trees/ and bushes, which are also covering/ the hill side about its base. The fort-/ress appeared to be in shape a parallel-/ogram, much longer than broad, and/ apparently, inclosing the ridge that/ formed the mountain top. Upon going/ nearer, we calculated the wall to be/ about half a mile in length and from/ thirty to sixty feet in height. In some/ places it had partly fallen, but most of/ the way it was standing as firmly as/ when made. It was built of limestone/ held up in regular layers, the stones/ being from a foot to two feet in thickness, and from two to four feet in/length, and some of the larger must/ have taken six or eight men to lift/ them into place. The stones had all/ been carefully worked into shape, but/ apparently rather by pounding than/ cutting with a sharp instrument, the/ faces and angles being all a little/ rounded, though the points were very/ close. They had been laid up without/ mortar, and were backed by small and/ broken stone, and then the whole en-/closure had been filled in with earth/ to the height of the walls. The port/ or gate way at which we entered was/ five or six feet wide at the bottom,/ bur gradually grew narrower toward/ the top until the walls nearly touched,/ and they had likely done so where the/ wall was entire, making a curious, long-pointed arch, if it could be called/ by that name. As we went in, we/ found ourselves in a walled passage/ open above. This passage led on and/ up toward the level of the walls above,/ growing wider at first and then nar-/rowing again until, when one stepped/ out upon the plane above, there was/ just rooms for one person to pass at a/ time. From the other side of the/ fortress, which is not more than twen-/ty or thirty rods across at this point,/ another just such gateway and passage/ leads us and opens upon the plane/ above within a few feet of the other,/ so that a few men placed here could/ guard both ports. When we reached/ this upper level, we turned to the left,/ and went toward the west end of the/ fortress, passing among the ruins of/ many round houses, generally made/ of small stones laid up irregularly/ with mud. They appeared to me to/ be more recent than the great walls./ Beyond these and near the west end/ of the fortress we found the remains/ of a curious round tower, made oft the/ same large worked stone as the walls/ themselves. It is about twenty feet/ high and thirty in diameter, and is in/ the shape of a truncated cone inverted,/ it being smaller at the base than above./ That the walls were purposely built/ so is known by what appears to be the/ remains of the

gateway, the walls of/ with are perpendicular. Upon each/ side of this doorway a rude human/ face is cut into one of the stones of/ the wall, the only signs of sculpture/ that I saw. About this tower, upon/ digging a little, we found great quan-/tities of human bones, many of them/ broken, and perhaps the result of some/ great struggle for possession of the/ tower itself. Among the bones we/ found pieces of figured pottery, and/ below what appeared to have been a/ pavement of large stones. Below the/ tower and nearer the edge of the fort-/ress were other walls, that appeared/ to be remains of large buildings, and/ in these we found many openings in/ which were skeletons, the position of/ the bones showing that the bodies had/ been doubled up, so that the knees/ touched the shoulders, and in this/ shape five or six bodies had been/ crowded into spaces in which a person/ would have trouble to sit comfortably./ The remains of the awathes [sic; clothes] in which/ they were wrapped still existed; but/ I hunted in vain for some cap or vase/ or implement – all those had been car-/ried away or destroyed, probably by/ the Spaniards soon after the conquest,/ as they likely left few stones unturned/ in their search

Passing back between the two gate-/ways, we went on towards the east to/ examine that part of the fortress,/ which is much the largest. After/ passing through many more remains/ of round houses, we came to the foot/ of another great wall of the same con-/struction as the first and from thirty/ to fifty feet high, and this had been/ built up and filled with earth like the/ first, so that here was another great/ fortress within and above the other./

We followed along this wall for/ some distance, and found many open-/ings where the stones had been pried/ out and bodies put in. These were all/ open like the first; but in some cases/ they had not been opened entirely,/ and we could see that they had been/ closed with smaller, irregular stones/ and mud, lending one to suppose that/ the race burying here were not the/ same as those building the walls, for/ those who built the wall would have/ hardly wished to weaken it in this/ way, and would certainly have re-/placed the large stones taken out./ We estimated that second fort-/ress was about half the length of the/ first, though less than half the width./ Near the middle of the wall we came/ to a passage way that was probably/ originally like those of the main fort-/ress, though much broken, and passing/ up to the top we found ourselves again/ among remains of round houses, and/ several of them were made of the/ worked stone. Toward the east end,/ we found that the perpendicular cliff/ formed the wall on the back side./

We went out of the fortress at the/ farthest point east, where the wall had/ been broken down, and following/ around the base of the fortress in front,/ we came again to the gateway where/ our horses were tied./

The fortress has likely been used/ by more than one race of people, and/ even now with a little work it could/ be made almost impregnable to the/ attack of men armed with such weap-/ons as were used here before the con-/quest. Mr. Wurthemann calculates/ that it must at least have taken twenty/ thousand men laboring twenty years/ to have built it./

Some years ago the prefect of this/ place sent men to cut down the trees,/ many of which were of considerable/ size, and to clear the ground, but the/ work was never finished and the trees/ falling broke down some of the stand-/ing wall, and the place has been/ allowed to grow up to thorns and/ bushes since, so that it is worse than/ ever. It is so covered with brush that/ all accounts of it must be very imper-/ fect, and it is to be hoped that some/ one will clear it carefully and thor-/oughly explore it. I had not seen/ half as much as I wished, but it was/ nearly night, and putting a skull in/ each end of my haversack, and then/ the whole over my shoulder to keep/ them from breaking, we mounted and/ rode down to the hacienda./

The next morning we set out to/ visit another side of the mountain,/ where there were said to be remains/ of buildings and a curious vareta, or bar, sticking out of the cliff. After an/ hour's ride we found ourselves at the/ foot of the mountain we had come to/ visit; for seven or eight hundred feet/ it rose as steep as one ever thinks of/ climbing, and then there was a per-/pendicular cliff, and upon a projecting/ ledge of this were two walls, one/ quadrangular and the other in the/ shape of a crescent. They appeared/ to be ten or twelve feet high, and had/ openings at regular distances near the/ top that looked suspiciously like loop/ holes. Above these some thirty feet/ was the vareta we had heard of in/ Chachapoyas, and which is believed all through the country about to be/gold. It looked to us much like a pole/ ten or twelve feet long and standing/ horizontally out of the bare rock./ Though we did not doubt much that/ it was wood, it certainly was strange/ how it came there, for it certainly/ never grew there, there being hardly/ soil enough to raise lichens./

Mr. Wurthemann and the doctor/ contented themselves with a view/ from where we stood, but pulling off/ my coat and shoes and stockings, and/ telling the peons to follow with the/ gun, I was soon climbing as fast as/ the use of both hands and feet would/ allow me. Arriving at the foot of the/ cliff, I

found myself immediately under/ the buildings which were some fifty/ feet almost perpendicular above./ The Indians declared there was no/ passage to them, but after following/ along the cliff both ways, I saw a nar-/row ledge that seemed to lead up to/ their vicinity, and climbing a tree and/ scrambling from this upon the ledge,/ after creeping along this for some dis-/tance, I found myself at the foot of the/ first wall. It was built of limestone,/ cut like those of the great fortress, but/ much smaller and laid up in mud./ The openings that appeared like port/ holes did not in reality pierce the wall,/ but were stones that had been drawn/ back from the general face of the wall,/ apparently for ornament. The base/ of the wall was built upon the ledge/ upon which I was standing, which was/ not more than three feet in width and/ was then carried up perpendicularly/ to the level of the ledge some twelve/ or fifteen feet above, where it probably/ formed a part of the foundation of a/ large building that was built upon the/ second ledge. That the wall before/ me was the foundation and not the real/building was very apparent, because/ the passage between the wall and cliff/ would but barely allow a person to/ pass, and it was crossed in several/ places by pieces of wood that tied the/ wall to the rock, they being secured/ in the cliff itself and then built into/ the masonry, and the golden bar which/ was now in plain sight was nothing/ but one of these same ties that had/ been used to support the superstruc-/ture, and had remained in the rock/ when the building had fallen./

The siege of the place must have/ been dangerous work. It could only/ be approached by one or two of these/ narrow ledges, and a grapple here/ would have been fatal to both besieged/ and besiegers, for both must have/ rolled off and struck sixty feet below/ on the rocks./

After satisfying my curiosity, I/ crawled back, and had just got down/ from the ledge and found the Indians/ who were waiting for me, when I saw/ a condor come flying in toward the/ cliff, and snatching the gun from one/ of the Indians, I fired and had the/ satisfaction of seeing him wheel and/ fall a thousand feet below in the plain,/ where the rest of the party were wait-/ing. It was a female, but weighed/ thirty-five or forty pounds and meas-/ured about ten feet when its wings/ were spread. Loading ip upon the/ back of one of the Indians, we went/ back again to the hacienda and passed/ the third night among the garapatos,/ Mr. Wurthemann and I looking much/ as if we had the small pox next morn-/ing./

Though we hade made such a hur-/ried visit, we were glad enough to get/ started back, and arrived that evening/ at the old man's again. We found him/ drank

and shouting, "Somos perdido! Somos perdido!" [sic; estamos perdidos] "We are lost! We/ are lost!" Upon inquiring the reason,/he told us the corn crop was cut with/ the frost, it was too dry for the sugar/ cane, and the ecclesiastics are med-/dling with politics. We are lost! we/ are ruined! Oh for the times of the/ Vicerey [sic], when ecclesiastics attented/ to spiritual matters and left politics/ alone! His wife finally quieted him/ and got him off to sleep, and we fol-/lowed his example./

The next day we heard of a large/ cave near our route to Chachapoyas,/ and as we were out upon an exploring/ trip, we determined to enter it. We/ had much difficult climbing to do be-/fore we reached the mouth of it and/ lost the doctor, but we had his candles/ and pushed on. The cave was wet/ and full of bats, and after going in/ several hundred yards, we gave up/ further exploration, Mr. Wurthemann/ declaring he would never go into an-/other cave in Peru, and covered with/ mud we scrambled back to our horses,/ sending a peon to find the doctor, and/ then rode back to town, getting here/ after night and well used up with the/ trip./

J. B. STEERE

Letter LIII [Peninsular Courier and Family Visitant, 11(45), November 3, 1872]

FOREIGN CORRESPONDENCE

Number LIII

CHACHAPOYAS, July 20, 1872.

After our return from Quillip [sic; Kuélap], I was/ in haste to go toward the coast, and/ finding muleteers, or arreiros [sic; arrieros], here/ from Celendin [Celendín], a town near Cojamar-/ca [sic; Cajamarca], who were about returning, I hired/ a mule for my baggage and a saddle/ horse for myself, and started with/ them. I had supposed that we should/ stop at the villages upon the road, but/ was mistaken, as we did not sleep/ under a roof from the time we left/ Chachapoyas until our arrival in Cel-/endin [Celendín]. The first evening they began/ unloading and preparing to pass the/ night on the bare hill side, while there/ was a tambo but a short distance off:/ but when I asked them why they did not stop at the tambo, they answered/ "garapatos" [sic; garrapatas], and I was then willing/ to sleep where they were, though it was/ rainy and looked as if we should pass/ the night

any way but with comfort./ As they unloaded the mules, they ar-/ranged the baggage in line, heaping/ it up three or four feet high, and then/ tying blankets from the top of this,/ they secured them below with takes,/ and made a little low tent under which/ they spread their sheep skins and/ ponchos for a bed. Following their/ example, I took a large horse cloth,/ and spreading it in the same way, was/ soon as comfortable for the night as/ could be expected, and I slept thus/ for the eight days of our journey. As/ soon as the mules were unloaded, the/ boys drove them off to the hills to/ pasture, while the men filled little/ earthen kettles, one of which each/ arreiro [sic; arriero] carried in a leather case strap-/ped upon his lead mule, with water/ from the brook, and building fires,/ were soon preparing supper. This/ was a corn pudding with plenty of red/ pepper, the arreiro [sic; arriero] sitting and stirring/ the mess with his wooden spoon, and/ tasting until he had got it to suit, for/ I found there was excellence to be at-/tained even in making this pudding./ The boys were now back from the/ hills, and each supplying himself with/ his wooden spoon and his matte - a/ platter made from the shell of a squash/ - they gathered round while each had/ his share poured out, and then a little/ sack of roasted wheat flour was open-/ed which served for bread, and they/ had their supper "this and nothing/ more," and thus they fared during the/ trip, and I was often glad to exchange some of the provisions for some of/ their hot pudding after a ride through/ the cold rain./

The next morning, after a breakfast/ the same in all its particulars, as the/ supper, they loaded the mules, strap-/ping on the loads as if they would cut/ the poor brutes in two, first covering/ the mule's head with a poncho so that/ he could not see to kick, and then one/ person on each side bracing with his/ foot against the mule's side, and pull-/ing the rawhide thongs with all their/ force./

We kept on up the little river Utcu-/bamba for three days, the arreiros [sic; arrieros]/ going slowly to allow their mules to/ recruit in the good pastures. We pass-/ed a couple of villages during the/ time, with fiels of wheat and barley,/ but most of the time the valley was/ too narrow for cultivation, and on/ both sides were dreary, barren looking/ mountains. The fourth day we crossed/ the river, and following up one of its/ branches, camped in a deep, shaded/ valley, where I found a great many/ beautified ferns. The next day we/ arrived at a place the valley/ widened, and there were here remains/ of large stone buildings, perhaps of/ the forthresses the Incas were accus-/tomed to build upon their great roads./ We were now at the foot of the second/ great range of the Andes, and the/

next morning the ground was white/ with frost. After half a day's clim-/bing, the first part of the way through/ a forest of bushy aldars [sic], we came to/ the summit called Calle Cálle [sic; Callacalla]. I think/ this is called fourteen thousand feet/ above sea level, and off to the south/ the peak of the Cajamarquilla is cov-/ered with everlasting snow. As we/ passed, a high wind was blowing that/ benumbed us with cold, but there was/ fortunately no rain nor sleet. We now/ descended rapidly, and when we stop-/ped for the night, were in sight of the/ Balsas and the Maranon [sic; Marañón]. The view/ from here cannot be surpassed. Moun-/tains of dark red feldspar and sand-/stone are piled up on every side, while/ the great bed of limestone that covers/ all of this country, broken to pieces/ here is tilted up upon the tops of the/ mountains. The river shows for a few/ miles a little ribbon of azure far below. And then is lost in the mountains./ The landscape with its chaos of rocks/ and mountains, with no green thing/ nor level spot upon which to rest the/ eye, made me think of those times/ when the world was new and the riv-/ers and the sea had not yet leveled/ and pulverized the earth for vegeta-/tion./

The next day we moved down with-/in a few miles of Balsas, and stopped/ again so as to reach the crossing early/ in the morning, and get the first raft/ across the river. The climate was/ already much warmer, and for the first/ time I did not need all my blankets/ for cover. By midnight the arreiros [sic; arrieros]/ were moving, as there was no pastur-/age, and they were in haste to cross./ It seemed dangerous to descend in the/ darkness, but giving the horse the/ reins, I let him find his own way, often/ down places as steep as a common/ stairway. In some places he could/ not reach to step down to the next/ foothold, but would crouch down and/ drop with both fore feet. After we/ had gone on thus an hour or more, we/ reached a climate that felt warm and/ comfortable, and as there was yet no/ appearance of morning, I stopped my/ horse until the others had gone by,/ and then spreading my pillow upon/ the ground and with the bridle over/ my arm, I slept until daylight, and/ then followed on down the little stream/ and through the village of Balsas, a/ cluster of povertystricken mud houses/ standing on the bare sand. It is said/ to hardly ever rain here, the rain all/ falling upon the mountain peaks above,/ while the valley, except where irrigat-/ed, is as bare as the rocks about it./ The climate is as hot apparently as/ that of Yquitos [sic; Iquitos], though if of course is/ higher than Borja two hundred miles/ below, where I found it quite cool in/ comparison to the ordinary climate of/ the Amazon./

The people look sickly, and there is/ said to be much chills and fever,/ though why there should be, with no/ vegetation and no water, but the pure/ river water running down from the/ mountains, I cannot tell. The people/ make their living, such as it is, in fer-/rying passangers and merchandise up-/on rafts or balsas, from which the/ place takes its name. Two of these,/ some thirty feet long and twelve/ broad, roughly made by lashing trunks/ of the light balsa wood together, lay/ hauled out upon the beach. The ar-/reiros had already unloaded their car-/goes upon the beach, and as I went/ down the single street towards where/ they were, I tried to buy some bread/ or something else to eat, but there/ was nothing for sale but oranges, and/girls and women with their sacks full/were upon the beach, trying to trade/ oranges with the arreiros [sic; arrieros] for flour/ and corn meal./ The oranges were/ brought down from more fertile val-/leys above. After waiting for a couple/ of hours for the raftsmen to get ready/ to take us across, they finally came,/ and drawing a raft along the shore to/ where our baggage was, they put it/on, and telling us to climb upon top of/ it, they pushed out, and by dint of/ hard paddling reached the other/ shore, some thirty rods below. The/ river was then about a hundred feet/ wide, but running with a very strong/ current. During the winter months/ it is broader, and often impossible,/ and many lives and much property/ have been lost, in trying to cross it at/ that season. Mr. Wurthemann has/ planned a bridge to cross it at this/ place, which, if built, will prove a real/improvement upon the present mode/ of crossing. After we were landed./ the mules were driven in and forced/ to swim across, and were then reload-/ed, and in a few minutes we were/ again climbing the steep mountain/ side. Just at night we stopped again/ in the cool climate of the highlands./

We were now near Celendin [Celendín], and a/ couple of hours' ride the next morning/ brought us to the top of the mountain/ and in sight of the pretty valley and/ town of Celendin [Celendín], and at end of my/ journey with the arreiros [sic; arrieros]. The town/ is built of adobes, but regularly laid/ out, and about it were many dark-/green patches of alfalfa and yellow/ fields of wheat and barley. As we/ entered the town, we passed through/ stubble fields in which barefooted/ girls were tending flocks of sheep and/ spinning. We had met the governor/ of the place at our last camping/ ground, and I now went to his house/ and then to that of the subprefect to/ engage beasts for the morrow./

The town of Celendin [Celendín] probably con-/tains four thousand people, and is sit-/uated in a beautiful valley that is warm/ enough so that corn

ripens, but the/ ground must be irrigated, and much/ of it lies uncultivated, though the re-/mains of large ditches show that the/ Incas used much more of it./

The next morning, the sub-prefect/ sent me horses, but in place of the/ good ones he had provided and I had/ paid for he sent the first two his sol-/diers picked up, belonging likely to/ some poor Indian who had given them/ little to eat and more work, but I had/ no friends in the place, and so swal-/lowed my wrath and started on to-/ward Cajamarca. Passing down the/ valley of Celendin [Celendín], we came in sight/ of another fine valley below, also be-/longing to a race of arreiros [sic; arrieros]. The/ little town in this is called Huauco¹⁰³./ This valley at its lower end seems to/ be dammed by the hills, and spreads/ out in a great marsh covered with/ coarse grass and reeds. Turning to/ the right before entering this valley,/ we passed up through some wheat/ fields to the hills again. The harvest-/ers were to work with the sickle, and/ though the owner was with them urg-/ing them on, I think the ten that were/ at work would not cut more than four/ acres in the day. They received twen-/ty cents a day for their work. The/ wheat was bearded, but of pretty/ good quality, and would yield perhaps/ ten bushels to the acre./ In another/ field were a lot of Indians, threshing/ with horses, driving them over the/ little stack and shaking out the straw/ with wooden forks. Wheat here in/ the interior is very dear, being now/ worth nearly three dollars a bushel, as/ near as I can estimate from their/ measures and money./

We passed all day over high plains/ covered with coarse grass, with here/ and there a mountain peak, but much/ more rounded than those about Balsas./ Many parallel ridges on the hillsides/ showed that it had been cultivated in/ many places anciently, but now all is/ desolate. Two or three droves of half/ wild horses and several immense con-/dors floating overhead, were the only/ signs of life, except as we met the/ long trains of mules laden with boxes/ of goods and casks of spirits for the/ interior. Just at night we again de-/scended into a valley with fields of/ wheat, and at dark my peon begged/lodgings for us at a little hut where a/ woman was boiling chicha. She made/ way for us in the hut that was half/ under ground, and so low that I could/ not stand under its straw thatch./ When she found I was a stranger, her/ heart softened, and she set about mak-/ing me a bowl of egg soup, and then/ settling me a platter of flour from/ freshly roasted wheat, she invited me/ to eat. She told one of her neighbors/ who happened in, that I came to this/ country to get something to eat, as/ my country was

very poor. She was/ roasting wheat, and making chicha/ for the wheat threshing that was to/ take place on the morrow. She had/ a pitiful story to tell me of the loss of/ her husband and eldest son, who were/ carried away by a freshet when trying/ to cross the harmless appearing stream/ than ran below, and then clearing a/ place for my bed among the pots and/ cooking utensils, she left me to sleep/ by the fire. The next morning she/ made us some more soup, when we/ rode on after paying her well for her/ trouble./

We passed for several miles through/ a valley devoted to wheat raising, but/ with many fine appearing fields en-/tirely destroyed with the frost. We/ finally turned off from the valley, and/ crossing another mountain, came in/ sight of the great valley of Cajamar-/ca, once one of the principals towns of/ the Incas. The valley is five or six/ miles broad, being formed by the/junction of two small streams. Just/ at the foot of the hills on the other/ side lay the city, with its many domes/ and steeples, with green fields of al-/ falfa surrounding it, while in the valley/ here and there were haciendas with/ their cultivated fields, and great tracts/ of common [sic] upon which droves of/ horses and cattle were feeding, while/ here and there were the low, cave-like/ houses of the Indians, thatched with/ straw or with agave leaves. After/ winding about through a maze of/ azequias [sic; acequia¹⁰⁴] and agave hedges, we finally/ came out to the hacienda of Tartar,/ where I am now enjoying the hospital-/ity of Mr. Morton, an Irishman of/ some twelve or fifteen years' residence/ in this country.

J. B. STEERE

Letter LIV [Peninsular Courier and Family Visitant, 11(46), November 15, 1872]

FOREIGN CORRESPONDENCE

Number LIV

CAJAMARCA, August 14, 1872.

¹⁰⁴ Acequia — A commonly operated waterway used in Spain and former Spanish colonies in the Americas for irrigation. Particularly in the Andes, northern Mexico and the modernday American Southwest, acequias are usually historically engineered canals that carry snow runoff or river water to distant fields. The Spanish word acequia comes from the Arabic "al saqiyia" and means water conduct. The Arabs brought the technology to Spain during their occupation of the Iberian peninsula. The technology was adopted by the Spanish and utilized throughout their conquered lands.

I had intended to spend but little/ time in Cojamarca [sic; Cajamarca], but finding some/ friends, I concluded to stop until the/ political troubles that were expected/ about the first of August, in Lima and/ elsewhere on the coast, were over and/ the country in quiet./

Mr. Morton was about to make a/ trip to Celendin [Celendín] to sell some horses at/ the fair, and as he put a horse at my/ disposal and promised me the sight of/ a bull fight, I went along. We rode/ back much quicker than I had come,/ being but little over a day; but upon/ our arrival we found the place in a/ great turmoil, the people having just/ stoned their sub-prefect to death./

Recruiting in the country, as in all/ others, should be done by voluntary/ enlistment, or by regular drafts; but/ law and practice are widely separated/ here as yet, the common method being/ to send out a few soldiers as a regular/ press gang, to seize upon every poor/ fellow they can lay their hands on./ Those who have patrons to reclain/ them are liberated, but the others have/ a suit of regimentals and little pay/ forced upon them, and then if they run/ away, they are chased as deserters/ and punished accordingly./

The sub-prefect had been in the/ habit of beating the alcaldes of the/ place and the other officials, when they/ did not please him, and now, to crown/ all, on the first day of the feast – the/ day upon which we arrived - the town/ being full of people from the surround-/ing country, he began to recruit, and/ had had already seized and locked up five/ poor fellows, when the town rose/ against him and stoned him to death,/ men and women running about foam-/ing at the mouth, as if they were mad./ After they had killed him, they began/ to cool, and scared with what they/ had done, when we arrived, they were/ leaving the place as fast as they could./ The next day, which should have begun the bull fighting, the town was/ nearly deserted, and at night many/ fled up the hill sides and passed the/ night in the huts of the Indians, as it/ was time for soldiers to arrive from/ Cojamarca [sic; Cajamarca] to avenge the death of the/ sub-prefect. The second day the/ streets were again deserted; but to-ward night a messenger arrived from/ Cojamarca [sic; Cajamarca], bringing word that there/ had been a revolution there, and that/ those now in power were not friends/ of the sub-prefect that had been killed,/ so that there was no danger from/ Cojamarca [sic; Cajamarca]. At this news they must-/ered their band of music and paraded/ the streets, with twelve or fifteen boys/ armed with shot guns and dint lock/ muskets, and news was sent into the/ country round that there would be a/ bull fight on the morrow./

The next morning the band and/ soldiers were again out in the streets,/ and in the procession were then led/ horses, each having on his back a/ bright colored cloth, heavy with tinsel,/ and looking much like the mantles/ worn by the priests when they cele-/brate mass. After parading the streets,/ the procession entered the great pen/ erected in the plaza for the bull fight,/ and having marched around it, and/ the soldiers having fired a volley, they/ presented the bright colored mantles/ to those having charge of the bulls,/ and marched out, leaving the pen/ clear for the games. The pen/was/ made by planting tall posts in the/ ground, and lashing long poles to these/ with rawhide thongs, to a height of/ seven or eight feet, making a rough/ but strong fence. The pen occupied/ the center of the plaza, and enclosed/ perhaps half an acre. Under the foot/ of the fence were many women seated,/ with oranges and dulces for sale,/ while looking through the fence, or/ perched upon top of it, were the lords/ of creation, a rough set of arreiros [sic; arrieros],/ Indians and half breeds, with here/ and there a man of the town with/ shoes on, and sometimes carrying a/ cane. A couple of young men, with/ white pants and shirts and red sashes,/ and looking much like base ball players but for the red ponchos they car-/ried, now entered the pen and walked/ about, that the people might have a/ good look at them, a friend handling/ them a bottle of aquardente [sic; aguardiente] from the/ fence. One of the bulls, which were huddled together in a small enclosure/ beside the other, was now lassoed and/ drawn into a narrow passage between/ the two pens, where he was firmly se-/cured, while a man reached down/ from the fence, and taking up folds of/ the skin upon his sides, punched holes/ through them with a large awl, and/ drew in strong cords, to which he/ fastened one of the glittering mantles/ so that it rested upon the bull's back,/ a collar was secured to his neck in the/ same way, and then the poles were/ drawn away from in front, and the/ lasso slipped from his horns, and he/ bounded out into the great pen and/ dashed at the first man he saw, at the/ same time several rockets being sent/ up to add their noise and smoke to/ the sport. The bull, mad with pain/ and fright, galloped around the pen/ several times,/ rushing at the men/ wherever it saw them. It then became/ more quiet, but as the men approach-/ed with the red ponchos it would dash/ at them again, the men stopping to/ one side and letting the bull toss the/ poncho as he went by. There did not/ seem to be near as much danger about/ it as I expected to see, as the bull's/ attention was invariably drawn to the/ red poncho, and when one of the men/ was closely pressed he had but to

drop/ the poncho, and the bull halted and/ gave him time to reach the fence./ After a few minutes of this sport long, straight swords were handed the men/ from the fence, and as the bull would/ dash by them, they would make a/thrust with the sword. The intention/ seemed to be to strike down between/ the shoulders to the vitals; but many/ were the failures, the sword generally/ striking the shoulder blade, and flying/ several feet into the air as the bull/ wheeled. Several times the blow was/ struck too far forward, and the sword/ piercing the heavy muscles, stood out/ on both sides of the neck. These/ wounds did not seem to do much but/ madden the bull; but finally a more/ lucky blow pierced down between the/ shoulders, and the poor bull, after try-/ing to again charge upon his enemies,/ tottered and fell, with the blood pour/-ing from his mouth. The people shout-/ed viva, and congratulated each other/ with "Que buen tora [sic; toro]," - what a good/ bull, - while the torreiro [sic; torero] cut off the/ trappings from the bulls's back, and/ the gate being opened, the band/ marched in and played a deaf march,/ while four men held the Peruvian/ colors over the bull until they had/ dragged him outside the gate. An-/other bull was now lassoed and com-/parisoned, and met his fate in much/ the same way as the first, though his/ body was not honored by being cov-/ered with the Peruvian colors and/dragged out to a death march. When/ the hacked bodies of three bulls lay/ outside the pen, the popular thirst for/ blood seemed to be slacked a little,/ and they went to their homes with the/ promise of four bulls to-morrow./

The next morning the trappings of/ the bulls that were to be killed that/ day were also paraded in procession,/ they being carried each by two horse-/men between them upon a pole. The/ crowd was greater than the day be-/fore, and the balconies overlooking/ the plaza were crowded with the/ beauties of the place, while in the/ streets below were the young bloods,/ mounted to the best of their means,/ and showing off their horses and/ horsmanship [sic]. The first bull turned/ into the pen could not be made to/ fight, though the torreiros [sic; toreros] shook their/ ponchos in his face, and called him/ "Chollo [sic; cholo]," - Indian, - and "vacca [sic; vaca]," -/ cow; it was of no use, and he was/ turned back into the other pen and/ his trappings cut off, and another took/ his place. This was a large bull, with/ straight sharp horns, and a wicked/ look that plainly had its influence with/ the torreiros [sic; toreros], for they fought shy of/ him for quite a while; but finally,/ when he was well tired, they brought/ out the swords. After two or three/ wounds, the bull became wary and/ would turn to one side and avoid the/ thrusts. After trying for some time/ to get a fair stroke at him, they be-/came impatient, and as he would/ wheel, they began cutting at him be-/hind. They soon cut his tail off, and/ then cut off another piece, the people/ laughing and shouting with delight./ Finally, to their great pleasure, a blow out the cords of one leg, and the bull/ limped about the pen; but the excite-/ment reached its height when the final blow cut the cords of the other leg,/ and the bull went creeping about on/ his haunches, women and men shout-/ing viva and swinging their hanker-/chiefs. One of the toreiros [sic; toreros] now mount-/ed on the bull's back, and struck the/ spine just behind the bull's head, and he fell dead./

Sick of the bloody show, I now re-/turned to the house where we were/ stopping. I had found myself uncon-/sciously sympathizing with the poor/bull, and almost wished that by a/lucky dash he might kill tormen-/tors. As I heard women and men/ shouting and cheering on the bloody/ sport, I could almost imagine myself/ in ancient Rome, witnessing the con-/tests of the gladiators; but as I glanced/ at the heavy sensual faces of the wo-/men and the cruel, cowardly faces of/ the men, I was undeceived, though/ the shouting rabble that attended the/ Roman games were likely far different/ in appearance from the stately, intel-/ligent looking men whose features/ have descended to us. Perhaps these/ obsequious fellows who take off their/ hats when they meet you, and answer/ your "How to you do?" with a "Para/ servir vusted [sic]," - to serve your grace/ - and who ask leave to pass on before/ they dare to leave your presence, may/ be much nearer like the clients who/ gathered about the great Romans than/ we might at first imagine./

The next day we returned to Coja-/marca [sic; Cajamarca], where we found a revolution/ had taken place peaceably, and a few days afterwards we heard of the revo-/lution in Lima, in which the president/ Balta¹⁰⁵ was killed, and the brothers Gutierrez hanged

¹⁰⁵ José Balta y Montero (Lima, 1814 - Lima, July 22, 1872). At the beginning of his public career he took part in the military operations consequent on the invasion of Peru by President Santo Cruz, of Bolivia, in 1836. He was an actor in the various Peruvian revolutions, was distinguished in the defeat of the Spaniards on 2 May 1866, and in 1867 led a revolt against the dictator-president Prado, and drove him into temporary exile in Chile. Colonel Balta was elected president for four years by a large majority in April 1868. His administration was on the whole prosperous and popular, but he burdened the country with immense loans for the purpose of building railroads. In the presidential contest of 1872 the vote was so close that the election was thrown into the congress, and when it became evident that Dr. Arenas, the administration candidate, would be defeated, Balta was strongly urged by general Gutiérrez, his minister of war, to declare himself dictator. But the president refused to do this, and made public his intention of resigning

naked, and after-/wards burned in the plaza, by the people of Lima./

The government of Peru, acting up-/on the plan of Napoleon III that the/ people must be occupied and pleased/ with shows and games, encourages/ bull fights, and then when there is a/ revolution, the people show their/ bloody training by stoning and hang-/ing and burning their former leaders./ Though some of the sets of the suc-/cessful party in this revolution are/ barbarous, the success of the move-/ment is considered by most thinking/ men to be the success of the liberal/ and enlightened party of Peru./

Cojamarca [sic; Cajamarca] has many more signs of/ taste and refinement than any other/ town that I have visited in Peru./ There are several stone churches, and/ their fronts are covered with carved/ work; but none of them are finished,/ the work having stopped with the/ revolution that made Peru indepen-/dent, and the country does not likely/ now contain men who could finish the/ work as it was begun. The houses/ are built of adobes and whitewashed,/ and are low without pretensions/ to beauty; but the court yard, which/ forms almost invariably the center/ around which these houses are built,/ often have flowers and ornamental/ plants that show there is some refine-/ment somewhere./

I was shown a wall here which, ac-/cording to tradition, is part of the/ wall of the Incas palace. It is cer-/tainly of ancient construction. The/ wall is not perpendicular, but drawn/ in at the top as if to form the base of/ a pyramid. The stones are laid up/ without mortar, and the points are/ very close, the stones being rubbed/ together apparently until they fitted./ The stones are not reduced to parallel-/ograms as they are in modern mason-/ry; but a large stone often has five or/ six faces, to which smaller stones are/ fitted. The wall is now about ten/ feet high, and forms part of a house,/ being completed with adobes./

There are in existence here many/ cups and vases of curious form, that/ are dug up from the ancient burying/ grounds, and often in such good pre-/serva-

tion that they are used to hold/ water, and some of the larger are put/ to their ancient use – that of holding/ Chicha. Mr. Morton has interested/ himself in this, and with his help I/ have made quite a collection of these/ curiosities. I found on old priest here/ who had formed quite a museum when/ younger, not only of these ancient/ "huacos¹⁰⁶," as they are called, but of/ birds and skulls and paintings; but in/ his old age he has lost his antiquarium/ taste, and now devotes himself to card/ playing, which invariably means/ gambling in this country. I found the/ old white-headed, trembling man glad/ to sell a part of his collection to me/ for a few dollars, which he likely lost/ at play that same night./

One of the most remarkable things/ here is the hot baths¹⁰⁷. I found the/ water bubbling over half an acre/ of ground, with the same sound as/ water boiling in a pot. There were/ several springs in this extent, the/ ground among them being a hot mud/ that is not comfortable to step into./ From these springs the water runs off/ in a stream eight or ten feet broad, of/ water too hot to bear the hand in,/ though it is already mixed with water/ from cold springs near by. At one/ of the springs several Indians were/ scalding a hog, and the piles of bristles/ and of feathers laying about showed/ that the springs were frequently used/ to save fuel. In the tepid water about/ the borders I found some curious little/ fresh water shells, and in a cold spring/ near by were little lobsters. The wa-/ters, a part of them, are conducted/ into some low buildings, where they/ are used for bathing, being reported/ to have medicinal virtues, though it/ may be nothing more than the cleanly-/ness of person that regular bathing/ ensures, this people lacking the clean-/ly habits of the inhabitants of the/ Amazon, to whom the daily bath is an/ essential of life./

The Indians here have many of/ them kept themselves pure from inter-/mixture with the whites, and they are/ likely the lineal descendants of the/ subjects of Inca Atahualpa. They/ live in little low tents, scattered over/ the plain, half above and half below/

his office, on the expiration of his term, to the successor appointed by congress. This did not suit Gutiérrez, and he immediately seized and imprisoned Balta, and proclaimed himself supreme chief of the republic. This usurpation was of brief duration. The new dictator had few sympathizers, and for days after his *coup d'etat* a disturbance took place in which Silvestre Gutiérrez, his brother and minister of war, was killed; in revenge, the usurper gave orders to kill Balta, and the latter was shot in his prison as he lay ill, July 22 (others say 26), 1872. That night the populace of Lima rose in insurrection. Gutiérrez, after a vain attempt to escape, was killed, and the legal president, Pardo, was inaugurated soon afterward. See also Pike (1967).

¹⁰⁶ Huaco or guaco is the generic name given in Peru mostly to earthen vessels and other finely made pottery artworks found in pre-Columbian sites such as burial locations, sanctuaries, temples and other ancient ruins. Huacos are not mere earthenware but notable pottery specimens linked to ceremonial, religious, artistic or aestetical uses in central Andean pre-Columbian civilizations. Huacas, on the other hand, are ruins or ancient structures – where most of the huacos are found – mainly funerary buildings. A huaquero is a person that digs in ancient pre-Columbian ruins illegally in order to get valuable pieces of artwork, usually destroying the structure.

¹⁰⁷ Baños del Inca, natural hot springs 6 km west of Cajamarca.

ground, and covered with straw./ They love chicha, and live upon meal/ made of roasted barley. They are/ short and ugly, but appear to be very strong./

Barley and alfalfa are the principal/ crops raised upon the plain of Coja-/marca [sic; Cajamarca], it being too frosty for corn and/ potatoes to some extent. The barley is/ generally raised on shores by the In-/dians, they doing the work and giving/ half to the owner of the soil for the/ seed and use of the land. They plow/ the ground with the wooden plows I/ have described, and even with such/ implements they raise good crops. The greater part of the valley is under/irrigation, so that do not depend/upon the rainy season. Mr. Norton/ had much barley sown in this way, / and it it was now the time of harvest / and threshing, we went to see the/ grain measured up. The Indians were/ cleaning it from the straw and chaff/ by throwing it into the air with wood-/en shovels. As soon as they had/ heaped up the grain, they made a/ little cross by tying two pieces of a/ weed together, and put it in the top/ of the heap, to make the heap increase/ in quantity, as they said. While/ threshing their grain, the Indians keep/ up a continual feast, drinking chicha/ and blowing upon a horn or trumpet/ made of a large hollow cane some ten/ or twelve feet long, with a mouth/ piece of gourd fitted to it. All day/ and all night we could hear this instru-/ment, it sounding much like a French/horn, but much louder. It takes an/immense amount of wind to blow it,/ and after blowing a chord or two, the/ Indian must stop for breath.

J. B. STEERE

Letter LV [Peninsular Courier and Family Visitant, 11(48), November 29, 1872]

FOREIGN CORRESPONDENCE

Number LV

CALLAO, August[sic; September] 14, 1872.

After the revolution at Lima and/ along the coast had subsided, Mr./ Morton concluded to make a trip to/ Ascope, a town within a day's ride of/ the coast, for a cargo of sugar, and/ we started together. The day before/ we began our journey was nearly all/ spent in breaking the fifteen wild/ mules that were to form our train,/ and in fitting them with great pack/ saddles to support the loads on their/ return. About the middle of the after-/noon the arreiros [sic; arrieros] got them

in motion,/ though a first there were many stops,/ as some refractory one would balk/ and kick until all was blue about him./ One succeeded in breaking away en-/tirely and making his way back to the/ pampa; but they got the rest through/ the town and up the mountain side,/ where they passed the night, we fol-/lowing the next morning. Before it/ was fairly light, we were leaving the roughly paved streets and the beauty-/ful churches of Cajamarca behind, and/were making our way up the steep/ and barren mountains that rise on the/ southwest. After two or three hours'/ ride, we came out upon an elevated/ and rough plateau, with here and there/ great masses of rock that had been/ worn by time into fanciful shapes of/ ruined castles and towers. We were/ now upon the dividing line between/ the Atlantic and the Pacific, the waters of/ Cojamarca [sic; Cajamarca] running to the Maranon [sic; Marañón]/ and the Atlantic, and those of the/ deep valley of Magdalena that now/ showed far below, running west to/ the Pacific. As we began to descend,/ we took off the ponchos that were/ hardly sufficient to keep us warm on/ the mountains, and we soon found/ ourselves again in the torrid zone/ among orange trees and little patches/ of sugar cane./

The valley that is capable of irriga-tion and cultivation, is nearly a mile/ wide here; but the little grass thatch-/ed village showed few signs of life, its only business appearing to be to sell/ a few fruits to the arreiros [sic; arrieros] who pass/ through, and as the fruits are out of/ season, business is dull. A Peruvian/ who accompanied us had a friend/ here, who gave us a plate of soup/ made of eggs and yuca, and this fur/nished our companion a subject of/ conversation all the rest of the day,/ he descanting on the good soup, and/ always finishing by saying that but for/ him we should have gone without it,/ Magdalena is to be the terminus of the/ railroad that is already building from/ the port of Pacasmayo, and the scream/ of the steam whistle may some day/ wake it up./

Passing on and crossing the stream/ – now a small creek, but at times a/ torrent that keeps travelers waiting on/ its banks – we passed up again out of/ the tropics into a temperate climate,/ where we passed the night at a tambo./ Another rough day's ride brought us/ to Contumaca, a town of several hun-/dred inhabitants, surrounded by wheat/ fields on the hill side, in which the/ harvesters were still at work. The/ cultivable ground in all this region is/ in very small quantity, and the ground/ now cultivated is often too rough to/ allow of anything but the rude imple/-ments the natives use./

Another day of climbing up and/ down mountains brought us to Cascas,/ where plantains again take the place/ of wheat. There is rain enough here/

at some times to make roofs necessary,/ though everything was so dried up at/ the time we passed that the poor/ beasts could get nothing to eat. We/ started from here at midnight, and/ succeeded in getting lost in an im/mense dry river bed, in which we/ wandered about among green clumps/ of organ cactus and a few thorny/ bushes until morning, when we found/ the road and kept on, passing out of/ the river bed at a few huts without/ roofs, a few branches serving to keep/ off the dew. The people cultivate/ some small patches of rice when the/ mountain rains fill the river so that/ they can irrigate./

The mountains here lose all signs of/vegetation, even the dead grass and/ weeds that we had seen before, and/ look as if they had just risen from the/ bed of the ocean, and had not existed/ long enough to be provided with soil/ and plants. Leaving the river upon/ the left, we followed up a narrow/ ravine, passing a large flat rock that/ nearly closes the passage, upon which/ passers by have erected a large num-/ber of little crosses made by tying/ two pieces of weed together and sup-/ported by little heaps of pebbles at/ the base. This rock is said to have/been a noted resort for highway rob-/bers, and the crosses may have been/ erected from mixed motives of thank-/fullness for their own safety and as/ offerings for the rest of the souls of/ those murdered here. We followed/ this ravine until we came to the sum-mit of the last low range of mountains,/ and looked down upon a great plain,/ extending thirty or forty miles to the/ coast, and apparently as level as the/ sea itself, with here and there hills/ like islands running up from the com-/ mon level. Green fields and belts of/ willows showed us that there was/ water and with it life./

An hour's ride brought us to the/ first hacienda, which consists of sev-/eral hundred acres fenced with mud/ walls, and being planted with sugar/ cane. A gang of Chinese were dig-/ging for the foundations of the sugar/ mill, and as they lifted their hoes and/ let them fall with their own weight,/ they seemed to be the very personifica-/tions of despair. They have to serve/ eight years for their passage, and are/ considered and called slaves in the/ meanwhile, being bought and sold as/ it conduces to the interest of the/ owner. I saw several American/ plows and other implements, and farm-/ing seems to be carried on in a better/ manner than in the mountains./

A ride of an hour brought us to the/ town of Ascope, which, likely, contains/ a thousand people. It has grown/ rapidly since the large sugar estates/ have been opened about it. Its prin-/cial street has several fine stores, and/ the display of goods in the windows/ and the number of new buildings/ remind one of the

new towns in the/ West. Ascope boasts of a hotel and/ a couple of eating houses managed by/ Chinese, and it seemed a luxury to be/ once more in a town where one could/ get something to eat and a bed, with-/out being dependent upon the hospi-/tality of strangers./

After a day's stay here, I found ar-/reiros [sic; arrieros] passing to the coast, and engag-/ed beasts of them, and was soon upon the last stage of my journey. A few/ miles from Ascope is the estate of/ Tascala. It is devoted to sugar rais-/ing and we entered the large sugar/ mill and passed through the various/ departments. The machinery is from/ Philadelphia, and the whole establish/-ment is likely very similar to many/ upon the Mississippi, though Chinese/ take the place of the Negroes as labor-/ers. Railroads reach to the cane/ fields, and horse cars were bringing/ in the cane, which was being thrown/ by three or four Chinese upon an end-/less belt that carried it under the/ crushers. The sugar made is an in-/ferior quality of loaf sugar, which sells/ for about seven cents per pound by/ wholesale. The refuse is made into/ rum./

I here left Mr. Norton, who had/ treated me with the greatest kindness,/ doing all in his power to assist me in/ my calling./

Passing through fields of sugar cane/ and by large sugar mills, and then/ through barren plains, only waiting/ for water to make them as fertile as/ the other, we reached Paihan, a small/ town also built up by the surrounding/ estates, but much poorer than Ascope./ The houses, like those of Ascope and/ all this country, have no roofs, the/ covering being flat and made of canes/ and mud, like the walls./

The next day we passed through/ remains of ancient towns, the mud/ walls still standing, and the old aze/quias [sic; acequia] showing that its ancient inhabi-/tants had much more ground under/ cultivation than the present./

Upon the top of a hill near Paihan [Paiján]/ a mud pyramid still stands, nearly as/ perfect as when made. It appeared/ to be thirty or forty feet broad, and/ about the same in height./

The dust which never is laid by a/ shower was very deep, and the mule/ just in front of me was often invisible,/ and I was glad enough when I heard/ the roar of the breakers, and soon/ after saw across the plain the masts of/ a ship rising up, as if out of the sand./ About noon, the ocean came in sight,/ and soon afterward we rode into the/ little town of Malabrigo [Puerto Chicama], built of rushes/ and covered with coffee sacking, and/ stringing along the beach just out of/ reach of the breakers./

After nearly two years of traveling,/ I had at length passed the/ South American continent at its

broad-/est part. I was certainly glad enough/ to be through with it; but whatever/ of the poetic or heroic the occasion/ may have suggested, was extinguished/ by the sight of the great breakers, six/ or eight feet high, rolling in all along/ the shore. The one who named this/ the Pacific Ocean could not have re-/ceived his first impressions of it at/ this place./

The town was full of mule trains,/ loading with boxes and bales from/ Lima for the towns of the mountains./ Several large heavy launches lay along/ the beach, which are used for the/ transportantion of freight and passen-/gers to and from the ships outside. A/ large number of bundles of rushes,/ would with cord and running to a/ point at one end, where they are also/ curved up like the bow of a boat, lay/ along the shore, and are used for fish-/ing and for carrying the mail out to/ the steamers, when the sea is too high/ for the launches to go out. Those/ curious boats or floats are six to eight/ feet long. They are called coballitos [sic; caballitos], or little horses, and the fishherman sits/ astride of it and uses a double-ended/ paddle or stick, with which he strikes/ the water, first on one side and then/ the other, to propel the boat and to/ keep it from upsetting. I saw them/ passing out and in through the heav-/iest breakers on these little bundles of/ rushes./

I was one day in advance of the/ steamboat, and while wandering about/ the sand hills and along the beach,/ found several acres covered with hu-man bones that had been dug out in/ the search after valuables. Nearly/ all the skulls seem to have been flat-/tened artificially from behind, throw-/ing the brain out over the ears in/ curious bumps that would puzzle a/ phenologist to classify. Filling my/ haverstock with a couple of these, and/ an assortment of sea shells, etc., I/ went back to town, and by making/ common cause with a merchant from/ Chachapoyas, I got a shelter under/ which to sleep for the night. The/ next day, about noon, the steamer/ came in sight, and the Indian boatmen/ pulled one of the launches into the/ edge of the surf, with several large,/ fairly-formed Indians, who seem to/ make a business of carrying passen-/gers and freight through the surf, and/ are clothed in woolen shirts that reach/ to the thigh, shouldered and carried/ us to the lauch, when the lauchmen,/ ten in number, began to pull at the/ oars. Several of the breakers, as they/ passed from under the boat, let it/ down upon the sand with a thump,/ and one of them came on board so as/ to wet us a little; but we soon made/ our way through them, and reached/ the side of the steamer. This was the/ Chili, one of the boats of the Pacific/ Steam Navigation Company. She was/ rolling and pitching, so that it was/ very dangerous

getting on board, we/ being at one moment at her side, and/ then twenty feet away./

We were three days in making our/ way to Callao, stopping at many little/ ports or places that are called such,/ though they are generally open to the/ sea, and with no wharves nor moles,/ so that it is necessary to receive and/ land everything by means of the/ launches. The Peruvian coast is a/ desert; plains, covered with shifting/ hills of sand, reach back to ranges of/ mountains a few miles in the interior,/ that are as bleak as they are, being/ guiltless of a bunch of grass or a tree./ It is only in the few places where/ streams come down from the moun-/tains further in the interior, where/ rain falls, that there is irrigation and/ cultivation./

All along the coast are rocky islands/ that appear to be the tops of buried/ mountains/ These are as bare of ver-/dure as the main land; but some of/ them have attained celebrity from the/ deposits of guano 108 that are found upon/ them. The supply at the Chincha 109/ islands has run out, and the Peruvian/ government now sends vessels to the/ islands of Huanape [sic; Guañape] and Macabi [Macabí], which/ are to the north of Callao and oppo-/site the city of Trujello [sic; Trujillo].

The next morning after embarking/ I was awakened by a most curious/ pungent odor, and going on dock,/ found we were anchored at the island/ of Huanape [sic; Guañape], among a fleet of between/ thirty and forty ships. The island is/ not more than three or four acres in/ extent, and the guano seems to be/ pretty near ground, a mound perhaps/ one hundred and fifty feet in thickness/ and an acre in extent still remaining./ Chinamen were at work with pick/ axes loosening this and wheeling it/ down to the mouths of shoots made of/ canvass. These reached down nearly a hundred feet to the water, and the/ sailors were busy loading launches at/ these and towing them to the ships'/ sides, where the guano was drawn on/ board in tubs and emptied in the hold./ A dust was rising continually from the/ guano while they were working it, and/ this seems to impregnate the air for/ quite a distance about the island./

Callao is a hurrying, bustling town,/ filled with foreigners. It is the port/ of Lima and Peru, and about a hun-/dred vessels of all nations are lying/ here./

Lima is seven miles off toward the/ foot of the mountains, and a railroad/ with several trains each day runs up to it.

J. B. STEERE

 $^{108\ {\}rm For}\ a$ brief history of guano in Peru, see Teixeira (2002: 5-8). $109\ {\rm Cf.}$ fig. 1 (p. 6) of Teixeira, 2002.

Letter LVI [Peninsular Courier and Family Visitant, 11(50), December 13, 1872]

FOREIGN CORRESPONDENCE

Number LVI

CALLAO, PERU, September 20th, 1872.

Callao has about thirty thousand/ inhabitants and is the port of Lima/ and through it of Peru. It is a busy/ bustling town and the streets are full/ of Italians, French, English, and/ Americans./

The town is built partly on the site/ of the old city which was destroyed/ by an earthquake, or the sea wave caused by one, some hundred and/ thirty years ago. The debris of the/ old town is now being dug away and/ its level as shown by the old pave-/ments was very near that of the mod-/ern town, and the old story of the sink-/ing of Callao, whose walls and church/ steeples could still be seen under/ the water of the bay is decidedly/ fishy. When Callao was rebuilt its/ inhabitants superstitiously abstained/ from building upon the site of the old/ town, and that part is still unoccupied/ or covered with the stone houses, fac-/tories, etc., of foreigners who do not/ have so many fears. The town is but/ a few feet above the level of the sea/ and the inhabitants still dread a re-/petion [sic] of the disaster, and generally/ desert the town in a body/ when the sea is troubled during times/ of earthquakes, as it often is rising and/falling mysteriously. At these times/ an image of Christ, that is kept at a/ little church built upon the spot where/ the great wave reached and stopped,/ is brought into requisition. The In-/dians and negros refusing to return/ to the town until the image is carried/ in solemn procession to the bay and/ its feet dipped in the water when they/ return to their houses in security./ This image is called "El Señor del/ Mar - the Lord of the Sea./

Callao seems to be a noted place/ for fighting or at least for shooting as/ some of the houses still show the marks/ of grape shot fired from the Spanish/ fleet when it attacked this town in/ 1866, and many of the houses along/ the streets are scarred by the bullets/ of soldiers and citizens, fired during/ the recent revolution. The glass front/ and the cases inside the store of/ Messrs. Colville & Anderson, American/ booksellers, are shattered with bullets/ fired from the quartel, or head-quarters/ of police, opposite where one of the/ brothers of the late Dictator shut him-/self in with his troops, and the door of/ the quartel, from the top hole in/ which the soldiers fired, is scarred and/ and

[sic] torn with many balls fired by the/ citizens; some show pretty good marks-/manship, but many are ten or twelve/ feet to one side./

The soldiers were armed with Win-/chester's repeating rifles, and it is a/ wonder that there were not more hurt./ The American and English Consulates/ were fired upon, and there seems to/ have been a reckless waste of ammuni-/tion by both parties./

The harbor of Callao has a hun-/dred and fifty or two hundred vessels/ of all nations lying at anchor. The/ most of them are in the guano trade,/ all vessels being required to come here/ for orders to load, after which they/ come here again for orders to sail./

There is lying here a curious old/ vessel that is said to have been one/ of Nelson's fleet at the battle of Tra-/falgar. Near this are lying two Amer-/ican-built monitors, sold by our goven-/ment [sic] to the Peruvians at the close of/ the rebellion, and beside these an iron/ clad built by the Peruvians, that looks/ like a huge turtle. Several open bat-/teries along the beach are said to/ have done good service against the/ Spanish, together with a couple of iron clad revolving towers, one at/ each side of the town. These each/ mount heavy Blakesly guns, and look/ as if they would be dangerous in good/ hands. The old Spanish fortress, an/ immense work and apparently of great/ strength, is no longer a part of the/ defences [sic] of the town, being used as a/ custom-house and filled with foreign/ goods./

Decks are now being constructed/ here, at which ships can lie to load/ and discharge, instead of using laun-/ches as at present./

Twenty minutes ride in the cars,/ through half cultivated fields of corn/ and potatoes, with mud walls and/ weedy ditches, and then, through lands/ still without irrigation and desert, -/ with still here and there immense/ mud-walls and mounds, the remains/ of old Inca cities, and we are in Lima./

The Peruvians delight in calling/ Lima the Paris of America, and in/ comparison with the cities of mud and/ cave [sic; cane] and palm-leaves of the interior,/ it is a paradise, but it would not stand/ comparison with any second-class/ city at home. The streets are narrow/ and dirty, and badly paved with small,/ round stone that are worn into ruts/ by the heavy carts. The houses are/ generally of one story and hardly over/ more than two, and are not particu-/larly remarkable for beauty, most of/ them being built of mud. The sub-/urbs fade into narrow lanes heaped/ with filth, – and even the little stream/ that runs through the town is piled/ with filth, – waiting the good offices of/ the buzzards or a freshet. There are/ some fine old churches, and some/ beautiful plazas with fountains and/ flowers,

and these people will point/ out the mamp-posts to which the late/ Dictator and his brother were hung,/ and the church towers to which they/ were drawn up and then their bodies/ allowed to drop upon the stone pave-/ment below, and then they will show/ you the spot in the plaza where the/ bodies were burned after being cut/ to pieces./

In Lima extremes meet, here are/ Indians from the interior dressed in/ coarse ponchos, and leather sandals,/ sauntering about with that dull stare/ with which the Indian invariably/ view modern improvement, and here/ are ladies, and gentlemen in the latest/ Paris fashions. The ladies of Lima/ are noted for their beauty and per-/haps truthfully. They still wear the/ mantilla, a black scarf that serves/ for a bonnet and covers the face all/ but one eye and the point of the nose,/ or discloses more as the wearer may/ wish. There are enough foreign ladies/ with little hats and bonnets and the/ other parapharalia [sic] that go to make up/ a fashionable head dress to lend variety/ to the scene. The Peruvian ladies/ paint or power or both to an im-/mense extent, and this gives them all/ a curious and unnatural pink and white/ complexion that only allows one to/ guess at their original color. Here/ and there are priests in long black/ gowns and hats, and nuns, or sisters,/ of mercy, with great white bonnets/ that nearly cover them up. Ponchoed/ horsemen gallop through the streets/ and great two-wheeled carts drawn/ by three mules abreast transport/ heavy freight, while long lines of/ mules and donkeys with sacks of raw/ hide across their backs, carry/ bricks and dirt and often take posses-/sion of the sidewalk,/

Beggars with their doleful whine are/ at every corner and in strings along/ the church walls, begging you in the/ name of God and the Holy Virgin/ and all the saints, to give; showing/ disgusting rags or sightless eyes, or/ some other of the numerous ills, flesh/ is heir to./

Upon the church walls or in some/ other conspicuous place are announce-/ments printed and painted upon can-/vass, of bull flights, for the relief of/ some charitable institution or in honor/ of some prominent man, a picture of/ a bull tossing the torero sword/ and all into the air, lending interest/ to the announcement, and a boy with/ a similar advertisement of a cock-/fight, parades the streets./

High above the noise of business/ you hear the cry "diez mil soles por/ manana [sic; diez mil soles para mañana],"— ten thousand dollars for/ to-morrow, as the seller of lottery/ tickets passes, with his roll of tickets/ and his book in which to record your/ name and residence, in case you draw/ the lucky number. He finds many/ customers, black and white and In-/

dian, and all subscribe to his loan, no/ matter whether the number of/ tickets sold amounts to three times/ the prizes, or no, rich and poor/ foreigner and native all take a chance./ There must be several hundred of/ itinerant ticket peddlers in Lima/ alone, but they do not monopolize the/ business. The streets are full of cake/ sellers with trays upon their heads,/ and bread merchants perched upon/ the hips of their donkeys, all the rest/ of their backs being occupied by the/ great raw hide panniers that hold the/ bread. Milk women come in from/ the country perched astride among/ their milk-cans that are hung to the/ saddle. Water-carriers use the same/ method and no one will go on foot/ here if they can help it./

Lima is more really Peru than Paris/ is France; it is the political, comer-/cial and social center. From it go/ the monthly supplies of money that/ keep the interior in existence, and to/ it come the merchants from all points/ of the country to buy their supplies./ Politicians come here for appoint-/ments as prefects or to other money/ making offices in the interior./

Lima has two short railroads com-/pleted, one from Lima to Callao the/ other from Lima to Chonillos [sic; Chorrillos]. These/ roads are both less than ten miles in/ length, two more are in process of/ construction, while several other roads/ are being built from the coast at vari-/ous points into the interior. Mr./ Henry Meiggs¹¹⁰, a Californian, seems/ to have monopolized this business./

¹¹⁰ Henry Meiggs was born in Catskill, New York, on July 7, 1811. He came to New York City in 1835 and began a lumber business, but was ruined by the Panic of 1837. He restarted his business, this time in Brooklyn, but again met with failure. Finding success in sending lumber to the Pacific Coast, he finally relocated to San Francisco after the discovery of gold by taking a cargo of lumber wood there in the Albany, a cargo which he sold for twenty times its cost. When Meiggs arrived in San Francisco in 1849, he, like many others, got into real estate speculations. In Meiggs' case, he promoted the possibility of piers along the north shore area, on the ground that it was closer to the Golden Gate than the usual harbor, located just south of what is today downtown San Francisco. Today, the site of Meigg's Wharf, in its day a marvel extending two thousand feet into the Bay, is occupied by part of Fisherman's Wharf, Pier 30 and Pier 45. To that end, he built warehouses, streets and piers in the area. Ho constructed sawmills and schooners. Meiggs became extended financially in trying to do this. In order to make ends meet, he illicitly obtained a book full of warrants on the Street Fund (which had little money in it), which the city's controller and mayor had fallen in the habit of signing by the book in advance. Meiggs forged the remaining informatiom and raised money. He left San Francisco before the fraud was discovered, on October 6, 1854, in the brig America, heading for South America. According to his own statement, he landed with only \$8,000 (his fraud raised, by some accounts, half a million), lost it immediately, and had to pawn his watch. Meiggs became a successful railroad builder, building the first

The weather here is remarkably/ cool and much of the time an overcoat/ would be comfortable. There is a/ good deal of fog and dampness, and/ the water of the sea is now too cold/ to bathe in. This coolness of the/ climate seems to be caused by the/ cold current in the ocean, that sets/ this way from Cape Horn and the/ South Pole. It is now winter here. The cool months here corresponding/ to the warm ones at one, this being/ south of the equator./

J. B. STEERE

Letter LVII [Peninsular Courier and Family Visitant, 11(51), December 20, 1872]

FOREIGN CORRESPONDENCE

Number LVII

CALLAO, PERU, October 1st, 1872.

All the nations of the earth have/ had their world's fair and monster/ exhibitions, and Peru, following the/ example of the rest, has just been hold/ing hers¹¹¹. Other nations have gener-/ally interested

railroad in Chile, between Santiago and Valparaiso. In 1852 the Polish engineer, Ernest Malinowski (1808-1899) moved to Peru as an expert in the field of railroad construction. The railroad project he suggested to the government, which would facilitate transport of minerals and valuable types of wood from the Ucayali River, across the Andes to Lima and on to the port of Callao was originally discarded as too revolutionary. But in 1871, the Congress of the Republic of Peru approved Malinowski's project. Contruction of the project began in 1872, with Meiggs participating in it. Meiggs died in 1877 in Lima, while constructing a railroad in Costa Rica, which was completed by his nephew, Minor C. Keith. He is said to have been the virtual dictator of Peru by that time, known as "Don Enrique", with interests ranging from silver mines to cleaning up the city of Lima by building a seven-milelong park. While his Peruvian contracts were wildly profitable, by 1876 his financial situation had begun to disintegrate. He found it more difficult to obtain credit. His 1877 death only worsened the economic chaos in Peru. He was buried at the Presbítero Maestro cemetery in downtown Lima (Harker, 1938; Lawrence, 1985; Montgomery, 1877; Myers, 1969; Stewart, 1946; Wetmore, 1871).

111 By the order of President José Balta, in 1869, in the place then occupied by the southern door of the walls of Lima, known as Puerta de Guadalupe, began the construction of the "Parque de la Exposición" and the "Palacio de la Exposición" (now in the Paseo Colón, in the center of Lima (barrio Santa Beatriz, delimited by the avenues Colón, Wilson, Paseo de la República and 28 de Julio), as part of the president's program of modernization of the city. The project was intended to harbor the "Exposición Internacional de Lima" in 1872, in commemoration of the 50th anniversary of Peru's

themselves in the/ management and arrangement of her/ exhibitions, but the Peruvian govern-/ment knowing but little about such/ matters, has followed the plan of the/ shoddy constructor who, being inform-/ed by his daughter's teachers that she lacked capacity, told them to buy her/ some, he would foot the bill; and so, for a million of dollars, Peru has purchased her exhibition, and the result/ is better than could have been ex-/pected./

A walk of twenty minutes from the/ depot of the Lima & Callao Railroad,/ though narrow, dirty streets, brings/ us to the suburbs of the city, and/ passing the penitentiary - a well con-/structed brick building – we come to/ the entrance of the exhibition grounds. / A sol – about a dollar of our money –/ pays for entrance, and passing through/ a narrow gate, we find ourselves with-/ in an enclosure of forty or fifty acres/ perfectly covered with beds of flowers,/ intersected with ditches for irrigation,/ and with drives and walks. Near the/ center stands a large beautiful build-/ing, and scattered about are others,/ smaller, one occupied by an American/ as a refreshment hall. We turn to the/ left and enter a long, low shed, where/ the agricultural implements are on/ exhibition. These are mostly Eng-/lish, our manufacturers not seeming/ to care to extend their business in/ this country, a few American plows,/ cotton gins, etc., forming the excep-/tion, and these being far from excel-/ent of their kind. Perhaps the Eng-/lish, also, send their poorer agricul-/tural implements abroad for exhibi-/tion; if so, they must have a poor lot/ at home. Two or three threshing/ machines without separators, and/ about the size of a fanning mill, would/ have looked small beside a Tornado/ thresher, or say other patent; but for/ the lack of better they were marked/ with the card "Premiado," – awarded/ the premium. A little steam engine,/ built by the boys by the Chilian school/ of arts, attracted considerable attention. There was no show of corn/ plows or cultivators, though these/ would be of the greatest use in this/ country; neither were there scythes/ and grain cradles, though a horse/ mower, apparently an English counter-/feit of an American patent, would lead/ those interested to suppose there was/ no step between it and the sickle, the/ implement still in general use in this/ country. An English steam plow was/ also on exhibition, and

independence. The planification of the Parque was in charge of Manuel Atanasio Fuentes and the Italian architect Antonio Leonardi, who was also responsible for the construction of the Palace, of neo-renaissance design. The completion of the works lasted two two years (1870-1871). In July 1872 both the park and the palace were inaugurated, with the above mentioned exposition. Nowadays the Palace is the Lima Art Museum.

I hear that/ several of them are in use here, though/ I have yet to see a decent furrow in/ Peru, turened by any plow. The rude/ wooden plows are still used in one/ field, and the steam plow in the next./ Several turnip and potato cutters,/ bean shellers, etc., finished the collec-/tion.

Passing out and through plots of/ flowers, rather lacking in variety, but/ making up in quantity, we came to/ cages of birds and animals, scattered/ here and there among the flowers and/ trees. The first were hawks and eagles, and then we came to a cage/ with three great condors; one a large/ male, with the back and upper part of/ the wings white, and with a fleshy crest, was using the might that cer-/tainly makes right among the lower/ animals, and was beating a smaller/ male with his wings so that the poor/ fellow had to take refuge in a little/ den under the rock upon which they/ were perched./

Then there was a cage of Brazilian/ turkeys, and others of bright-colored/ pheasants, and then a couple of foxes/ of the country, much like the gray fox/ of the North by smaller. Then there/ were some deer, and an enclosure with/ a miniature mountain of rocks, and/ three or four llamas and huanacos,/ long-necked, ill-shapen creatures of a/ dirty yellow color./

Then there were other cages of/ birds, and an attempt at a poultry/ show, which consisted of a bantam/ rooster, six or eighy young fowls, and/ a couple of dejected looking brahmas,/ and nothing more that I remember./

There was a pen of sheep and goats,/ among them a few good coarse-wooled/ English sheep, and near these a cage/ of Andean black bears, too small to/ be terrible, and hence ridiculous from/ their ungainly motions as they limbed/ about their cage, and pout their noses/ against the bars to beg for something/ to eat./

A cage of English rabbits stood/ near another of guinea pigs that are/ of much more value in this country,/ increasing rapidly and soon coming/ to maturity, and adding many a good/ dish to the Peruvian's none-too-plenti-/ful table./

We passed a couple of horrid Afri-/can hyenas, and beyond were two/ cages, each with a pair of the tradi-/tional, mangy, skinny lions of all ex-/hibitions, always interesting from their/great size and reputed courage, but/ likely poor representations of those in/their native deserts./

Then there were tigers, and a little/ elephant penned up with a camel that/ was continually harassing his bulkier/ compabion. Beyond these there was/ a row of cages of dogs of all degrees/ – mastiffs, bulldogs, Newfoundlands,/ terriers and poodles, sprang

to the/ bars as we passed, each asking in his/ own way to be let out of that misera-/ble place — the bull-dog with a howl/ that threatened us in case we did not,/ and the poodle with a melancholy/ whine that begged for his mistress's/ arms, instead of that great den large/ enough for the elephant./

Beyond these were half a dozen/ Durham and Devon cattle, and as/ many hump-backed cattle from Asia,/ with a few horses, and then some/ cages of beautiful cockatoos and par-/rots and paroquets from Australia/ finished this heterogeneous show of/ animals./

We now passed across the interven-/ing field of flowers, and entered the/ central building. There is first a hall/ with broad stairways leading up to/ the second floor; but we pass on/ through another door, and enter the/ main room and find ourselves among/ saddles, bridles, cutlery, bolts, nails,/ perfumery, and many other things -/ all mixed together. A smaller rrom/ beyond has been fitted up by one of/ the upholsterers of the city as a par-/lor, with a splendid carpet and fine/ furniture. Here and there among the/ articles, as if dropped by accident, are/ the cards with the word "Premiado"./ Then we go up the stairs through a/ real gallery of paintings. Here are/ works of Peruvian artists, and copies/ of works of the old masters, and here/ are works of the old masters them-/selves, owned by some of the old rich/ families of Lima and lent for exhibi-/tion. Among the pictures, the blue/ cards of estimation are also seen; but as we reach the upper floor, and turn/ to enter the main room, we find our-/selves among great shelves covered/ with hundreds upon hundreds of dif-/ferent qualities of wines, brandies,/ gins, whiskies, beers, ales, and if there/ is any other species of strong drink,/ of that also, each with its appropriate,/ bright-colored labels, and as showing/ the all-embracing taste of the Peruvi-/ans and the zealous labor of the tas-/ing committee, almost every different/ brand and mark bore the magic word/ "Premiado", and the shelves looked/ as f they had gone through a smart/ shower of blue tickets./

We pass on, into a collection of/ preserved meats and pickles, and then/ we are among shelves and cases of/ dry goods, when a guard comes to tell/ us that it is time to close the doors,/ and we pass out through the blue/ tickets, and give a farewell look at/ the paintings, and we have seen the/ Peruvian World's Fair./

I do not remember of seeing a single/ thing of Peruvian manufacture in the/ place, not even a wooden comb from/ Cojamarca [sic; Cajamarca], nor a hat from Moyobam-/ba, nor a bale of cotton from Tarapo-/ ta [sic; Tarapoto]. There is said to be a good collec-/tion of ancient Peruvian pottery, but/ we overlooked it./

The exhibition should certainly be/ useful to the people of Lima, if for no/ other reason, by its giving them a/ means of useful and innocent enjoy-/ment. It will likely be a profitable/ investment for exhibitors as an adver-/tisement of their merchandise, and/perhaps the man who got up the ex-/hibition to order may make some/ money./

Since I have been here I have made/ several short trips to places near by./ The first was to Ancon [Ancón], a village per-/haps twenty miles to the north of Lima/ on the coast. There is a railroad to/ it, and taking the train at nine o'clock/ at Lima, we arrived there only half-/past ten. The road runs at first through a valley, but little of it yet under cul-/tivation, much being covered with/ marsh that has grown up to reeds and/ rushes. Then we came to a cutting,/ and crossing a high bridge of pine/ timber that swayed and croaked un-/der the train, we came into the plain/ of Ancon [Ancón], that was covered with sand/ hills, drifting here and there. The/ road is rough, and one is often nearly/ thrown from his seat by the jolts./ Ancon stands on the sea shore in the/ midst of the sand. It is used as a/ bathing place, and the number of snug/ little houses, brought, as it is said,/ ready made from the United States,/ shows that during the bathing season/ the population must be considerable./ The streets are now deserted, except/ by a few Italian fishermen, whose/ boats lie along the sand./

The landlord of the little hotel/ where we stopped took us back into a/ little yard, where he had a wind mill/ at work raising water from a well,/ which was used to irrigate a little/ garden of shrubs and flowers he had/ planted in the sand. They were grow-/ing luxuriantly, and all of these sand/ plains seem to be rich enough when/ irrigated. The water found here is/ too brackish to drink, and that must/ be brought from Lima to supply the/ village./

After dinner we set out across the/ hills to the huacas, or ancient burial/ grounds, passing on the way what ap-/peared to be the site of quite a town,/ there being dozens of large flat stones/ of porphyry that has been worn into/ hollows, and polished smooth by use/ in crushing the corn of the ancient in-/habitants. Several walss or cellars/ still appeared, that had been walled/ up with adobes or with stone. From/ one of these a large quantity of cotton/ in the seed had been taken, and now/ lay about over the sand. In the valley/ beyond we began to come to graves,/ and soon for many acres the ground presented a most horrible sight./

Around the pits that nearly covered/ the ground were large quantities of/ cloth, the wrappings of the dead, and/ among them were arms and legs, and/ al-

most entire bodies with the flesh/ shriveled, and dried to the bones, and/ the limbs twisted and distorted in/ every shape; heads, still covered with/ hair, and still so natural as to make/ one shudder, lay all about us, grinning/ from the little hillocks where they had/ been placed by the ressurrectionists, or/kicked about among the other parts/ of bodies below. The air was full of/ a strange, sickening smell from these/ centuries-buried bodies, that had been/so carefully wrapped up and buried by/ friends and relatives, now uncovered/ and kicked about as if they had been/ dogs. I found myself wishing to die/ in some other land than this, where/ my body would sooner go to decay,/ and ran no risk of being dug up by/ the barbarians that another thousand/ year may bring, for the ring that/ might be found on a finger, or the/ buttons from the clothes./

The digging "huacas," as it is/ called, well agrees with the temper of/ this people, when they can get over/ their superstitions. They will work/ twice as long and as hard, in the hope/ of finding some objects of gold or/ silver that would buy the thing after/ it is found. It is of a piece with their/ buying lottery tickets. They prefer/ the hope of uncertain gain to the/ surety of certain moderate reward for/ their labors./

The graves are often ten or twelve/ feet in depth, and are either round or/ square, and were covered with a large/ mat of rushes upon canes, to keep the/ sand from caving in. Generally a/ number of bodies are found together/ in a sitting posture, with boxes of cane/ and jars to hold the chicha and corn,/ and other necessaries for the journey/ to the other world. Each grave, likely,/ holds a family, and it was probably/ opened at the death of each member,/ and then the severing carefully put/ back again. The bodies were wrapped/ in many folds of cloth, some of it of/ considerable fineness, with embroid-/ery, etc., of the wool of the vicuna and/ other animals of that family. The faces/ of the dead appear to have generally/ been painted with red paint and then/ covered carefully with cotton. I saw/ the dried bodies of several animals -/ apparently of the family of dogs; and/ these had been as carefully wrapped/ and buried as the human bodies./ They had been tried friends, and at/ death were buried with their masters./ I also found the body of a llama./

Pieces of fishing nets, slings for/ throwing stones, and spindles for spinning, were lying about, and in one/ place I found all the implements for/ weaving, and a girdle in process of/ making. It had probably belonged to/ a little girl who had died before its/ completion, and her work had been/ buried with her to be completed in/ another world./

It seems as if the Peruvian govern-/ment should but [sic; put] a stop to this whole-/sale violation of graves, or at least/ should compel the husca [sic; huaca] diggers to/ bury the bodies again, as this treat-/ment of the human body can not help/ hardening the hearts of those engaged,/ and making them more careless of/ human life. The Peruvians prefer to/ trace their descent from the Incas/ rather from the Spaniards, and/ it looks rather out of character for/ them to allow the bones and bodies of/ their ancestors to be kicked about/ over all the sand hills of the coast./

Upon my return to Callao I found a/ sail-boat going over to the little island/ of San Lorenzo, that by its shelter/ forms the bay of Callao. It is from/ three to five miles distant, and appears/ to be nearly two thousand feet in/ height. It is only used as a stone/ quarry; but I had heard that the orig-/inal wild potato was found upon it,/ and set out to find it. The island ap-/pears to be perfectly barren; but pass-/ing up a valley between two of the/ mountains, and then climbing up the/ side of the western one, after half an/ hour's work, I found myself near the/ top and in a little valley, where the/ fog settled in quantities sufficient to/ support several species of plants that/ were now in blossom, and among these/ the potato. There was no doubt of it; the little plant, with stalks often but/ five or six inches long, was a potato;/ but whether the progenitor of the one/ that now forms such an important/ article of food, must be ascertained/ by experiment. It is growing in a/ soil that is not more than an inch and/ a half in depth; and it multiplies ap-/parently from the seed only. But one/ eye sends up stalks, and the others/ produce genuine roots. It appears to/ go on growing large for several years,/ the stalks dying in the season when/ there is no fog, and growing again/ when the damp weather commences./ Some of the potatoes were as large as/ walnuts. Though they are not troubled/ with Colorado bugs, they seem to have/ some enemies even here, for many of/ the tubers were filled with holes made/ by some burrowing insect. They are/ said to be bitter when cooked, but/ to become good after two or three/ years' cultivation. There are two or/ three distinct species of potatoes cul-/tivated in this country, though we/ have but one in the States. They had/ likely been cultivated and improved/ by the Incas and other Indians, many/ years before the whites discovered the/ country./

On the way down I saw many pieces/ of round shells, now nearly rusted/ away, and below a modern conical/ shell that had failed to explode. Below/ near the sea was a burial ground that/ had formerly been used for interring/ foreigners and seamen. It was now/ part of it buried forty feet deep by/ one of those curi-

ous, moving sand/ hills. Here were head-boards lettered/ in all civilized languages, among them/ one of pine that bore the year 1840, and was placed above the body of a/ship boy from an English ship-of-war./ It bore some stanzas apparently origi-/nal, and by the chaplain of the ship./ The board was still sound and bright,/ but had been used as a target for/ musket firing./

J. B. STEERE.

Letter LVIII [Peninsular Courier and Family Visitant, 11(52), December 27, 1872]

FOREIGN CORRESPONDENCE

Number LVIII

CALLAO, PERU, November 1st, 1872.

After providing myself with letters/ to some of the Americans living at/ Pacasmayo, I set out, on the first of October, on the little steamer Taloa,/ for that port, with the intention of/ making a collection of the curious/ pottery that is dug from the ancient/ graves along the coast. There were/ several ship captains on board, who/ were going from Callao down to the/ guano islands of Macabi [Macabí] and Guanape [Guañape],/ where their vessels were loading, and/ as I was considerably interested in/ guano and its method of shipment, I/ accepted the invitation of Captain/ Layard, of the English ship "Mogul,"/ to pass a few days with him while ex-/amining the islands. Upon our arrival/ at Macabi [Macabí], the steamer laid up to one/ of the ships at anchor, and I was soon/ domiciled on board the "Mogul."/ Upon stepping into her cabin, the/ smell of ammonia was so strong as to/ make me catch breath, and for several/ hours after my eyes felt as if over the/ fumes of a smelling bottle. The smell/ of guano is not that of pure ammonia/ exactly, but it is not very disagree-/able, and one soon becomes accus-/tomed to it, and those who have been/ upon the island for many months are/ healthy./

When we arrived, the sea was quite/ rough, and the spray was dashing/ almost over the island, and most of/ the ships had called off their men and/ quit work. Within little more than/ stone's-throw were fifteen large ships,/ only the largest being profitable in the/ guano trade. These were mostly Eng-/lish, but there were four Americans, a/ Swede and a Frenchman./

The next morning we took the ship's/ boat and went on shore. The island/ is perpendicular from the

water to a/ height of thirty or forty feet, on nearly/ all sides, and the only way to land/ was a stair case suspended from above/ and fastened to the rocks, while below/ this hung a ladder and ropes. The/ surf was rolling in heavily and cover-ed/ the ladder every few moments,/ and the whole affair looked rather/ serious for a landsman; but the boat/ was backed in under the ladder, and/ while the men held to the oars to keep/ from being dashed against the rocks,/ we waited a favorable chance, and/ caught upon the ladder and climbed/ up, one captain getting drenched by/ a wave that covered the ladder before/ he could climb up./

We now found ourselves in a little/ village of board huts, of the Chinese/ laborers, there being two or three of a/ little more finish where the managers/ lived. The part of the island upon/ which we landed had already been/ cleared of guano, there only remain-/ing a heap of inferior quality, with/ piles of many hundreds of mummified/ seals and birds that had been sorted/ from the guano shipped. There was/ also a great heap of what appeared to/ be canvass, coarse, heavy cotton cloth/ that was also said to have been found/ below the guano./

The island appears to have been/ inhabited by some ancient race; per-/haps hunters or birds, eggs and seals./ Below eighty or a hundred feet of/ guano a hut was found still standing,/ and with it many human bodies, and/ several of those curious dishes found/ in the graves upon the main land./ There were also found several canes,/ or staffs of office, curiously curved. I/ saw one of the posts of the hut that/ now served as a support/ to a little/ grog shop. It was carved with sev-/eral rude human faces. The shanties/ of the Chinese were dirty and not fit/ for decent dogs, while the outside of/ everything was covered with the red-/dish-brown of the guano. We were/ tramping in a coat of this dust, and/ the air was full of it, and our faces/ and clothes soon took on the prevail-/ing color. We entered a low grocery,/ with a plentiful supply of drinkables/ and very few eatables; and passing/ through the bar and lifting a diry/ curtain, we found ourselves in the/ sanctum sanctorum where were seated/ the eight or ten English captains,/ playing whist and drinking poor cog-/nac and beer. Poor fellows! They/ are often here three or four months,/ loading, and sometimes thiry or forty/ days without a pound of guano. A/ stroll about the dusty, desolate island, and a toss of a stone or two at the/ seals on the rock beyond, and then/ they return to their whist and beer, and then aboard the ship again, and so the dreary time passes./

Leaving this place, we visited an-/other that served as a post office, and/ had a bar and an old billiard table;/ but sea captains do not seem to take/ much to billiards. We now crossed/ to the other island, or rather to the/ other part of the island, on a wire/ bridge just wide enough for one to/ pass at a time, and swaying at every/ step. It spans a narrow chasm that/ divides the island, and is sixty or/ seventy feet above the water that was/ now dashing through it in great waves,/ that were broken into spray on the/ rocks. Several seals were sporting/ about, as if they ran no risk of ship-/wreck. A few days before a Chinaman/ had fallen from the bridge, but was/ picked up alive by one of the boats/ loading with guano. This part of the/ island is the larger, and contains per-/haps four acres. The side on which/ we landed had been partly cleared of/ guano, and across the open space/ Chinamen were wheeling guano to/ the shoots on each side of the island./ Beyond rose up the mound of guano/ still remaining, and appearing to be/ from one hundred and fifty to two/ hundred feet in depth in the center,/ and still covering more than half the/ island. Chinamen were perched along/ the base of this hill of guano, loosing/ it up with long-handled pickaxes, and/ throwing it down to those with wheel-/barrows below, while and old negro/ overseer sat on a lump of guano and/ watched them. The air was filled/ with the peculiar odor of ammonia,/ and climbing up to the perch of the/ Chinaman who was picking up the/ fresh guano, it was so strong as to/ start the dears./

The guano at any considerable depth/ is of a dark blue color and almost as/ tenacious as clay; but upon exposure/ to the air it soon turns to the common/ reddish-brown color and crumbles to/ dust. At a depth of a hundred and/ fifty feet from the top I saw them dig-/ging out mummified seals, and birds/ and bird eggs; nothing seems to have/ decayed. When these are found in/ too great quantity, they injure the/ quality of the guano and must be/ picked out. They seem to be little/ but leathery skins, enclosing the bones,/ and all crushed flat by the weight/ above them. The Chinamen slowly/ worked away, with their look of/ mingled indifference and despair. I/ was told by one of the managers that/ there were over twenty murderers/ about us. An Indian or a white man/ of this country may get punished if/ he commits a crime, that is, if he has/ no money to bribe the judges and no/ influential friends to help him; but a/ Chinaman is worth too much to be/ hung, or to waste his time in prison;/ so the Chinese murderer is sold to the/ guano islands, and there serves the/ balance of his time, and if he murder-/ed a Chinaman, the unexpired term/ of service of his victim also. The/ Peruvian farmer pays four hundred/ dollars apiece for the Chinamen as/ they arrive, and is entitled to eight/ years' work,

and this is too much to/ lose for a mere question of crime./

Here we are at the shots. These/ are long canvass bags, reaching nearly/ a hundred feet to the water below,/ and there are the launches from the/ different ships waiting their turn to/ load. One has just loaded and is/ pulling away to the ship, while the/ manager above puts up a large figure,/ indicating the launch that will be al-/lowed to load next, and this is pulled/ under the shoot, which is within thirty/ feet of the rocks over which the waves/ are breaking. The sailors catch at/ the chains hanging from the shoot/ and fasten them to the launch, and/ then, perching themselves in the ends/ of the boat, a signal is given, and the/ Chinamen, one after another, empty/ their loads above, and they come rat-/tling down into the launch which is/ thrown by the waves almost on end./ The sailors are enveloped by a cloud/ of guano dust, and then a wave breaks/ over them and wets it down. A few/ minutes, and the launch is loaded, the/ wheelbarrows stop, the chains are un-/hooked, and the men in the launch/ and those in the small boat, sent with/ a line to assist them, pull away; but it/ is some moments before we can tell/ whether it will go forward the ship or/ upon the rock, but finally it moves off,/ and another comes in to go over the/ same thing. While I was there, one/ launch, spite of the exertions of the/ men, was carried in against the rocks/ and stove to pieces, as it was filling/ with water, and the men already up/ to their waists, the small boat picked/ them off, one poor fellow, who could/ not swim, crying. As the launch went/ to pieces, the sea for a considerable/ disatance round was colored a dark/ yellow with the guano from it, and a/ number of seals rose to the top, and/ went swimming round to see what was/ the matter with the water./

This guano business is made to fill/ the pockets of a good many persons,/ and in diverse ways. The captains are/ privately given to understand that a/ certain sum of money paid to a certain/ party will conduce much to the rapid-/ity of their loading. Any unlucky/ person who does not take the hint/ may send his launch day after day and/ week after week, without once seeing/ his number among the lucky ones/ shown above the shoot./

As we pass on, we notice a little/ mound of guano near the edge of the/ island, and a head-board upon which/ has been painted by the ship's car-/penter some tears, and below the/ words, "Ci qit [sic; gît] un Francais [sic; Français];" another/ board has a short inscription in Swed-/ish or some other Northern tongue,/ and further on are several mounds/ without head boards, the resting place/ of the Celestials./

We can now see the form of the/ island and the heap of guano. The/ island is nearly round, and the guano/ was in the shape of a depressed cone,/ over two hundred feet high at the/ center of the island, and gradually/ tapering toward the edges all around./ It seems to have had all heaped upon/ it that would lie, at the time work was/ commenched upon it. The guano on/ the ouside is soft and dusty, and one/ sinks into it ankle-seep at every step./ Dried seals and birds lie here and/ there over the surface, and there are/ many holes tunneled by a small bird/ that makes a passage two or three/ feet long, and lays one egg at the ex-/tremity. A Chinaman was digging/ for these birds, and I got one of him/ for a specimen./

Farther on we came to a large rock,/ separated a little from the island, and/ upon this were hundreds of seals, two/ or three of them appearing as large as/ bulls. A lively little Swedish captain/ had brought his pocket full of stones,/ and after several trials finally succeed-/ed in hitting one of them, that only/ turned a little and moved its flippers./ Several sea buzzards were perched on/ and among the seals, waiting appar/ently for some one to die. On one end/ of the rock several sea birds had their nests, and sat still though all the noise and stones./

A little further on we came where/ the sea from the west beats against/ the island. There is a large cave here,/ and the waves were rushing into this/ and striking with a noise like thunder,/ and then a great cloud of foam and/ spray would come puffing out, and/ dampened us a hundred feet above./ We had now passed around the island/ and seen it above ground, leaving the/ rest for another day./

The next day, providing myself/ with a gun, I set out with Mr. Stap-/ley, a young German engaged in the/ business of the loading company, to/ visit the caves under the island. I/ had procured permission of the Peru-/vian governor of the island to kill one/ seal, as they were said to be plentiful/ under the island. We descended a/ stairway, and found ourselves in a/ large cave open to the sea, that is used/ for a shop in which to repair the/ launches used in transporting guano./ From this we entered a low, dark,/ muddy passage, and after groping/ along it for a few rods, came out to/ the sea again in another large cave,/ into which the sea reached so as to/ give us little standing room. The/ roof of this cave was supported by/ several pillars, the bases of which/ were washed by the sea, and in ledges/ upon these pillars many sea birds/ were nesting, in the perpetual twilight./ A lucky shot killed two of these, and/ the waves brought them almost to our/ feet. Another dark passage, and we/ came out into another cave, just in/ time to see a couple of seals

waddle/ into the water, but too late to shoot at/ them. A large heap of seal dung,/ with the fresh marks of their flippers/ still upon it, showed to my satisfaction/ the true origin of the vast deposits of/ guano upon this tract. Birds may,/ and undoubtedly have, assisted to/ some extent; but in comparison to the/ whole, but an insignificant fraction/ can be placed to their credit. The/ guano has been deposited so rapidly/ by the immense number of these large/ animals, that it has not had time to/ oxidize until buried below the reach/ of the atmosphere, and with rains to/ dissolve it, it has gone on increasing/ to the present amount./

There are some reasons for thinking/ that there has been a change in the/ level of the land since the principal/ deposits have been made, since the/ islands are now almost perpendicular/ and inaccessible to a height of thirty/ or forty feet, while the level, washed plains and sea shells, that are found/ many miles in the interior, show that/ at no very ancient date, geologically/ speaking, the land was much lower./ A difference of thirty or forty feet/ would make the Macabi [Macabí] and Guanape [Guañape]/ islands low and sloping from the sea/ up. In the different conditions of the/ sea at such a time, there may have/ been much more of the fish upon/ which the seals feed./

At whatever time formed the origin/ of the guano deposits, must be plain/ to any one who examines the subject./ There is now supposed to be three/ quarters of a million tons of guano on/ the Macabi [Macabí] island, and half a million/ tons on the Guanapes [sic; Guañape]. The supply/ at Chinchas islands, the first beds/ worked, is exhausted. There are still/ supplies at the Lobos islands, still/ farther north, but their amount seems/ to be unknown, and there are some/ smaller deposits./

I found at the Macabi [Macabi] islands an/ American doctor from Texas. He of/ course had been a secessionist, but,/ what was worse, he is one still. It is/ certainly a gloomy life to lead, thus/ wandering over the earth, as some of/ these men are still doing, with no/ country they can call their own. The/ doctor, spite of his proclivities, seemed/ glad to see me, and came on board/ the "Mogul" to visit me several/ times, and did all in his power to assist/ me. He has built himself a little room/ upon one of the launches, and has/ christened it "Uncle Tom's Cabin."/ During the rough weather while I was/ there, it was pitching about enough/ to upset even a sea-going stomach;/ but the doctor seemed to thrive under/ it, though he must have had to tie/ himself into his bunk when he wished/ to sleep./

I had now seen all there was of/ Macabi [Macabi] Islands, and whiled away the/ remaining days,

until the coming of/ the steamer, in shooting the sea birds/ that were flying about the ship. The/ steamer Bogota came along about/ noon, and after an hour's run we came/ to anchor off Malabrigo, my first port/ on the Pacific, and here we waited/ two hours for launches, and for an in-/terchange of visits between our cap-/tain and that of the other steamer on/ her way back to Callao./

When we steamed on again toward/ Pacasmayo, and it became evident/ that we should not get there in time/ to land by daylight, the faces of the/ passengers for that port began to/lengthen as they told of the heavy/ surf we would have to encounter in/ landing. We finally came to anchor/ just at dusk, about a mile off shore at/ Pacasmayo, and we could plainly see/ the long, white breakers rolling in/ between us and shore. There was but/ one launch, and this came along the/ bows of the steamer and made fast,/ and seemed likely to be filled up with/ steerage passengers and Chinese; but/ we carried or baggage forward, and/ getting it lowered by a windlass, and/ choosing each a lucky movement when/ the launch was alongside, we jumped/ in, the rope was cast off, and the men/ set at the oars, it now being too dark/ to see the shore. As we drew near/ the line of breakers that we could see/ rising up between us and the twinkling/ lights on shore, more than one of us/ thought of the fate of a boat-load of/ passengers at Eten, a port a few miles/ below, only a month before./

The guiding oar broke, and the/ oarsmen, who are all Indians, became/ frightened, jumped into the sea, and/ made their way to land, leaving the/ passengers to their fate. The boat/ turned sidewide to the waves and was/ swamped, eleven passengers — men,/ women and children — being drowned,/ only two escaping, and they with the/ greatest difficulty./

As we neared the line, the steers-/man began encouraging the men by/ shouting, "a dientro valientes," - "in-/to it, my hearties," - and then a great,/ white capped wave passed under us,/ and dropped us nearly upon end, and/ then another that broke over us enough/ to wet us a little; and we had passed/ through the heaviest and were soon/ striking upon the sand bottom. A/ rope was now carried on shore, and/ several of the long-shirted waders,/ with pads of sheepskin upon their/ shoulders, were soon alongside to/ carry us to land. A couple of boys/ carried my baggage and conducted/ me to a hotel, at least that was what/ it was called. It was kept by a Swede/ and his wife, and they spoke a mix-/ture of all the languages known. I/ soon got to bed and tried to sleep,/ but the fleas were swarming in such/ quantities that this was rather a seri-/ous matter; but I finally fell asleep,/ listening to

the drunken talk in the/ bar rooms, only separated by a canvass/ partition. I was soon rescued by/ Messrs. Backus and Maynadier from/ this place, and went to work collect-/ing the "huacos," or ancient Peruvian/ pottery I was in search of./

I found that hiring men and dig-/ging them from the graves was too/ slow and uncertain business; but as/ there were many scattered about/ among the people of the town, I/ bought these up, getting in all nearly/ a hundred and forty different dishes./ Among this collection, bought at ran-/dom at Pacasmayo and the town of/ Chepen and San Jose, there were/ hardly two alike. They are made to/ represent fruits, roots, birds, serpents,/ turtles, fish and monkeys, while the/ human form is tortured into all sorts/ of shapes to give variety to them./ Quite a common form is a double jar/ with a connection between the two; upon one there is a human figure, or a/ bird, and upon the other a mouth into/ which water is poured which drives/ the air out at the whistle which is/ placed inside the figure upon the other./ The noise thus produced in some cases/ imitates the cry of the animal repre-/sented./

The material of which most of these/ are made is black, and some of them/ are well polished. The art of making/ this black pottery is not now known/ among the Indians of the coast. There/ are many coarse, yellow and red cups/ and plates and pots that served for/ every-day use for cooking, etc., and/ many of these are still marked with/ fire. It seems probable, from examin-/ing a collection of these dishes, that/ they are of several different ages, and/ perhaps there are remains here much/ older than the time of the Incas, as/ bodies and pottery once buried in this/ soil and climate preserve for an in-/definite period with little change./ The careful study of some person may/ bring to light more of the history of/ ancient Peru than we yet dream of./

I made several trips along the rail-/road already running, after birds and/ "huacos," and finally went with Mr./ Maynadier, the Superintendent of the/ line, to Pai Pai, the present terminus,/ about thirty miles up the valley to-/ward Cojamarca [sic; Cajamarca]. The company who/ are all Americans, as well as most of/ their engineers, paymasters, etc., are/ building the road rapidly, and intend/ to reach Magdalena, within a day's/ ride of Cojamarca [sic; Cajamarca], next summer./

Several shops are lying at Pacas-/mayo, unloading railroad iron and/ iron bridges from England, red wood/ ties from Oregon, and cars and en-/gines from Albany, New York. For/ the first twenty miles the road runs/ over a pretty smooth plain, mostly/ uncultivated, but with many old ruins/ of houses and fortresses,

and ditches/ for irrigation that show that it was/ not always so./

At Pai Pai we crossed the bridge,/ and stopped at a collection of tents/ and huts made of boughs like those/ of school children, and this is the/ town of Pai Pai. A little beyond,/ track laying was going on, this heavy/ work being mostly done by "Chil-/lenos," [sic] - inhabitants of Chili. Work/ is the great desideratum here. Eng-/lish and Americans wish to do the/ overseeing and the bossing, and there/ are plenty of them; but the lack is in/ somedody to be bossed. Irishmen/ would be a godsend, if rum was not/ so cheap; as it is, they would be drunk/ all the time, and break each others'/ heads and those of all the Chinamen/ and Chillenos [sic]. The river valley be-/comes narrower near Pai Pai, and the/ road goes winding about through cut-/tings in the rock. We took horses,/ and rode up the line about twenty/ miles farther, most of the way being over a/ torrid plain, already for the track./

At Galliaretas [?] we examined some/ curiously marked rocks. The valley/ here is nearly cit across by a spur of/ the mountain that runs down nearly/ to the river, the other bank of which/ is a precipice, forming part of the/ mountain side. Some ancient military/ engineer seeing the value of this point/ in a strategical view, built a large/ stone wall from the spur to the river,/ thus completely cutting off the valley./ The remains of this wall still exist,/ and a great ridge of stone. The rocks/ that form this spur are completely/ covered with inscriptions, or rather/ engravings. They are figures of men,/ and of tigres and birds, and among/ the rest curious figures that seem to/ represent scepters of staffs of office,/ with a bird or animal perched upon/ top. The curious fortification lines/ that so often form the ornament upon/ the earthen ware, is also seen fre-/quently. Some of the engravings/ appear to be very old, and others,/ fresher, are cut over them. In one of/ the rocks are three holes, a foot and a/ half in depth and six inches in diam-/eter at the top. Those are polished/ and worn by use, and some claim they/ were used for pounding quartz to/ separate it from the gold, though/ there are no mines now known here./ The stone upon which these engrav-/ings are made is a hard quartzite, and/ the marks seem to have been made by/ a sharp-pointed instrument, in some/ cases the figures being only marked/ in outline, in others with much more/ pains./

After a very pleasant stay of three/ weeks, and with all the huacos I could/ buy, and all that my new made friends/ had to give, I went on board the/ steamer Peruano, and after four days/ uncomfortably spent in steaming along/ this naked coast of bare mountains/ and drifting sand hills and rough surf,/ and in lying

at anchor waiting for the/ little freight that came on board from/ the dozen little ports, we finally ar-/rived here, two days ago, all safe./

J. B. STEERE

Letter LIX [Peninsular Courier and Family Visitant, 12(8), February 21, 1873]

FOREIGN CORRESPONDENCE

Number LIX

TUMBES, PERU, December 10th, 1872.

On the fifteenth of November I set/ out from Callao on another trip to the/ North, intending to go to Equador [sic]/ before my return. When we arrived/ at Casma, several of us went on shore/ to pass the time while the steamer was/ unloading freight. The harbor is ex-/ceptionally good for the Peruvian/ coast, an island breaking the heavy/ seas that come from the west. There/ is a railroad being built from here into/ the interior by Mr. Meiggs, and we/ found a clean little village of wooden/ houses, built and furnished in Ameri-/can style, and the American flag,/ floating from a little flagstaff, would/ have made us think ourselves in Yan-/kee land but for the bleak hills and/barren sand plains about us. The/company have not yet laid any track,/ but have a number of miles graded/ and ready. The Peruvian government/ seems to be building little railroads at/random, all along the coast, without/ any settled plan for connecting the/ cities and towns of the coast with each/ other, or of connecting the coast with/ the interior, but this may be accounted/ for likely from the peculiar formation/ of the coast country, which is made/ up of narrow valleys made cultivable/ by irrigation, and of bare, rocky hills/ and mountains that separate one valley/ from another. From Casma we could/ look back upon range after range of/ these mountains, the tops of several/ being covered with snow./

The valley of Casma is now barren,/ but an immense azequia [sic; acequia] that used to/ tap the river of Santos, and bring part/ of the waters to fertilize this valley,/ with many old walls and mounds and/ burial grounds¹¹², show that at some day/ this was a great center of life and in-/dustrry. Mr. Meiggs has bought a/ large tract of land here, and has en-/gineers examin-

ing the old Indian wa-/ter course, with the intention of re-/pairing it, so as to again irrigate the/ valley./

Trujillo is one of the oldest cities in/ Peru¹¹³, and I determined to visit it and/ the remains of the old Indian city near/ it, though the roughness of the sea at/ Huanchaco, its port, is famed and/dreaded all along the coast, hardly a/ year passing that passengers are not/ dorwned in landing from the steam-/ers. When we arrived off the port,/ the surf was breaking almost out to/ the anchoring ground; but after a/ couple of hours's waiting, a launch was/ seen making its way out to us, and/getting ourselves and our baggage/ into it as well as possible, we turned/ toward the shore. We were soon/ among the breakers, and I could tell/ by the white and trembling lips of the/ passengers and their hasty prayers, that we were in the most dangerous/ part. A wave came over us, pretty/ thoroughly drenching us, and half/ drowning a few women and children/ who were crouched under the thwarts;/ but after we got to land all safe,/ and found ourselves in the little town/ of Huanchaco. It has perhaps six/ hundred inhabitants, crooked streets paved with/ rough stones. There is no cultivable/ land near, and the people live by fish-/ing and by landing passengers and/ freight from the steamers./

A number of the rush floats, or *ca-lballitos*, upon which they pass through/ the breakers, lay along the shore, and/ haf a-dozen naked little Indian boys/ were flundering in the wash of the/ surf, trying to keep their balance up-/on miniature caballitos, and thus un-/consciously learning the business of/ their fathers. A rough cross between/ a cart and a hack, drawn by two gaunt/ horses, was ready to take passengers/ to Trujillo, and four of ur crowding/ into the narrow box, we were soon on/ our way. For several miles we passed/ over a level but barren plain, and then/ we entered among old walls, built of/ sun-dried brick. Some of the walls/ are eight or ten feet in thickness, and/ twelve or fifteen in height, and there/ are several large mounds from sixty/ to eighty feet in height./

This is said to be the remains of a/ city called Chimu [sic]¹¹⁴, governed by a king/ of the same name, who was conquered/ by the Incas. The ruins extend to the/ sea coast on one side, and to the foot/ of the mountains on the other, and I/ should think they covered nearly as/ much ground as New York City./ Passing for perhaps two miles through/ these ruins, we came to a part of Tru-/jillo that is outside the walls, a

¹¹² Probably a reference to the archeological site of Sechín (about 1600 BC), about 5 km southeast of Casma.

¹¹³ Founded in 1536 by Pizarro.

¹¹⁴ The ancient Chimu capital of Chan Chan, about 5 km west of Trujillo. Built by the Chimus around 1300 AD, it covered about 28 sq km, and at the height of the Chimu Empire it housed an estimated 50,000 people.

long/ street of mud houses, now nearly des-/erted and going to decay, and then/ we came to the walls of the city, also/ made of mud, and eight or nine feet/ high. We passed through a large/ wooden gate, over which were the/ Peruvian arms, and an inscription to/ the effect that Trujillo was the first/ capital town of Peru that declared for/ the Constitution and the Republic,/ which was done in the year 1820./ The gate is covered with sheet iron/ that is scarred with musket balls, the/ marks of some of the revolutions/ it has passed through, or perhaps of/ some raid of English pirates.//

Trujillo has about ten thousand in-/habitants, and is likely decreasing in/population. It has fifteen or twenry/ large churches, built of adobe, but some of them finely ornamented with/ plaster. The streets are paved with/ rough round boulders, and a walk is/ no pleasant thing. I stopped at the/ hotel Nacional, kept by an Italian./ The walls were plentifully painted/ with battle scenes, and with Greek/ and Roman gods and goddesses, all/painted by the proprietor; but the/ principal attractions of the house were/ a couple of billiard tables, at which/ several young Englishmen, overseers/ of estates in the country, and the/ young bloods of the town were play-/ing. Trujillo is said to be the home/ of the oldest and most aristocratic/ families of Peru; but everything seems/ to be going to decay. A railroad that/ is projected to a port further south,/ where the landing is said to be safer than at Huanchaco, may allow it to/ regain something of its former im-/portance, though the effect of these/ comparatively peaceful times must be/ to build up the town immediately/ upon the sea, at the expense of those/ which are a little distance from the/ coast./

Trujillo, like Lima and several other/ cities of Spanish America, seems to/ have been built of at a little distance in-/land for no other reason than to be/ out of reach of the cannon of English/ buccaneers that used to sweep along/ these coasts every few years, taking/ everything clean as they went, gath-/ering up rum, tobacco, silver, and/ everything else of value, and then/ sailing home, when the successful were/ knighted for their services to the/ crown. This people have no reason/ for loving the Gringos, as they call all/ people of Anglo Saxon blood./

The valley to the south of Trujillo/ is cultivated, though there is a great/ complaint of scarcity of water. There/ must have been much more water in/ the time of the Incas, as the Indians/ appear to have had many times the/ present amount under cultivatiuon, or/ perhaps it was used with more care/ and rule. I found nothing here for/ sale from the Indian ruins, such things/ being gathered up, and sent to Lima/ as

fast as found. I passed a day in/ wandering among the ruins of the In-/dian city, and was invited by a Peru-/vian, upon whose property I found I/ was trespassing, to visit his house,/ which was built beside one of the/ great mounds. He had several of the/ squares of the old city under cultiva-/tion, the ancient walls now serving for/ a mere peaceful pupose./

During the time of the American/ rebellion he had planted cotton, and/ the dying trees, some of them eight/ and ten feet high, were still giving a/ few bales of cotton. He is troubled/ for water, and has planted several/ acres of the cactus upon which the/ cochineal insect feeds, as this needs/ but little moisture. In one field he/ had two or three acres of red peppers,/ an article that is most extensively used/ in the food of all these South Ameri-/can people. A dozen Chinamen were/ hopelessly hoeing away at the few/ weeds that the drought would allow to/ grow, but their weak efforts at/ cultivation seemed puny enough be-/side the great ruins around them, of/ a former civilization./

Large sums of money have been/ spent in digging for treasure among/ these ruins, and everywhere I found/ great heaps of earth and mud-bricks/ thrown out. Considerable quantities/ of gold and silver have been found,/ but likely not enough to pay for the/ labor expended, though many jars,/ vases and emplements have been found/ that would have been of immense/ value, if carefully preserved, in the/ museums of the world. The vessels,/ and images of gold and silver which/ were generally very light, were pound-/ed up and melted down for the metal/ they contained./

There is a tradition that this city/ had been overthrown by an earth-/quake before the coming of the Incas,/ and there appears to be some ground/ for the story./

In passing out toward Huanchaco,/ I found an ancient road, but more mo-/dern than the ruins, as some of them/ had been pulled down to be make way/ for it. It was about twenty feet wide,/ and walled with low mud walls about/ two feet in height, and followed along/ parallel with the sea. It was likely/ one of the military roads of the Incas./

The plain all the way to Huanchaco/ was covered with pieces of pottery/ and signs of former cultivation, but/ without walls or remains of houses,/ the people likely returning from the/ fields to the walled town every night./

Returning to Huanchaco, I took the/ next steamer to Pacasmayo, and find-/ing the barque Elvira ready to sail for/ Tumbes, I went on board the next/ morning, and after a pleasant sail of/ four days along the coast of Peru, we/ arrived at the mouth of the Tumbes/ river, finding already at anchor two/

American whalers, and two vessels loading wood for Callao./

Tumbes is in the extreme north-/west point of Peru, a little tongue of/ land here jutting into the territory of/ Equador. It is very near the point/ where the rain belt reaches the coast,/ and though it rains but seldom, this is/ sufficient to give a green appearance/ to the country that is not found to the/ north. Among the trees thinly scat-/tered over the hills are several species/ of cactus, and several of thorny,/ scrubby acacias, among these the/ algarroba that is of considerable use,/ the trunk, though crooked, growing to/ such a size as to serve for fire wood/ and for posts for the houses, its fruit/ being contained in small pods that are/ full of a bitter sweet substance that/ fattens all kinds of stock, the pods being gathered and sold like corn by/ the sack full./

Tumbes is a mud-built, rush-thatch-/ed town of five or six hundred inhab-/itants, and remarkable for its cleanly-/ness. It has little visible means of/ support, there being no exports but a/ little wood sent to Callao and very/ few chacras, so that the people must/ go into the moister country farther/ north of Equador, to buy the plantains/ that serve them as the staff of life. It/ has been quite a resort for whalers to/ wood and water, whaling seems/ to be on the decrease in this part of/ the Pacific. I found here several/ American whaling captains that had/ settled and married here, and almost/ every one can speak a few words of/ English./

I had a letter of introduction to/ Captain Smith, an Indianian, who has/ charge of the petroleum wells and re-/finery, and I was soon comfortably/ settled with him at the refinery, which/ is a couple of miles from the village./ The works comprise a distillery and/ carpenter and tin shops. Everything/ about the whole place has the unmis-/takable odor and color of crude petro-/leum. The crude oil is brought in a/ small schooner, provided with tanks,/ from the wells that are fifteen or/ twentry miles down the coast. The process of distillation is much the same as that used for producing alcohol./ The first oil coming over is very light/ and inflammable, and is the benzine/ of commerce. It is likely from allow-/ing too much of this to be mixed with/ the kerosene that the latter becomes/ dangerous. When the oild gets down/ to a certain weight it is called kero-/sene, though no one can say just where/ the line between benzine and kerosene/ is. The oil still grows heavier, and in/ time becomes too heavy to be incor-/porated with the kerosene, and is then/ called heavy oil. The refuse left in/ the still is coal tar. After distillation/ the kerosene is treated with acids and/alkalies, and then washed

several times/ over in water, when it becomes ready/ for market. As seen in bulk in the/ treating tanks, it has a light indigo-/blue color. The kerosene is all sold/ in Peru and Equador, and is put up in/ the cans for market. The tinsmiths/ find considerable trouble in getting it/ fairly fast, it being so volatile that the/ cans often leak upon handling or ex-/posure to the sun. Curiously enough,/ the crude oil, fresh from the well with/ all its impurities, is more volatile than/ the refined oils, and it is almost impos-/sible to confine it with solder in this/ climate. The crude petroleum is used/ in running the steam engine of the/ works. A jet of stream is thrown/ against the petroleum as it dtops from/ a supply tube, blowing it into fine/ spray that is ignited as it passes under/ the boilers. It keeps up a steady,/ strong heat, and it looks as if petrole-/um might be more generally used for/ fuel./

After a few days spent in hunting/ among the algarroba groves about the/ refinery, and along the sea beach at/ the mouth of the river, I went with/ Captain Smith to Torritos, down the/ coast where the oil wells are situated./ Crossing the river at the village of/ Tumbes in a canoe, and swimming the/ horses, we passed through four or five/ miles of plains and algarroba groves,/ with no cultivation escept a few/ patches of cotton that were planted/ during the war of secession in the/ United States, and are still giving a/ few blossoms and bales of cotton. We/ finally came out to the village of Cor-/alles [sic; Corrales] that is said to be on the site of/ the Inca city found here by Pizarro/ on his first landing. The village is/ inhabited only by Indians, and is scat-/tered over a large space, the houses/ being perched here and there on the/little hills, without regard to streets./ The people have few chacras, but con-/siderable droves od donkeys and goats./ The remains of a large azequia [sic; acequia] pass/ through the village, and the large,/ level plains between the village and/ the sea was likely once all under cul-/tivation; but the present population/ is too shiftless to irrigate. We could/ see remains of stone and mud walls in/ the hill sides, and one of these was/ said to be the site of the great temple/ of the sun; but the few rains of this/ part of the country have nearly washed/ away the mud bricks that form the/ lasting ruins of the rainless region/ further south. We passed down into/ the plain from the village, the path/ passing among low trees. These plains/ are covered every year, at the time of/ the rains, with grass that dies as the/ dry season sets in, forming a sort of/ hay. This, though now a year old and/ very brown, was being eaten by droves/ of donkeys, goats and a few cattle/ that seemed to thrive upon it. We/ started up a few long-legged bustards,/

and I shot at them, a fox that was/ lying in the shade of a bush, ran off./

As we passed towards the south, the/ hills gradually approached the sea,/ until we arrived at a point where they/ came down to the water's edge, it/ only being possible to pass at low tide./ Beyond this the hills kept close to the/ sea until we reached the oil wells,/ they and the buildings standing upon/ a narrow strip of six or eight rods/ wide, between the sea and the hills./ We first came to a derrick, where/ several men were at work sinking a/ new well. They had already struck/ oil that would pay seventy barrels per/ day; but it was too heavy to give a/ good percentage of kerosene, and they/ were going deeper. Beyond were the/ wells now being pumped. They now/ yield from eight to twenty barrels/ each, though when first dug they/ yielded ftrom fifty to seventy. The/ wells are about two hundred feet deep,/ though oil is found in considerable/ quantities within a short distance of/ the surface. The country for a long/ distance inland is covered with rough/ hills of two or three hundred feet in/ height, with a few scrubby trees grow-/ing upon them. After a couple of/ days spent in hunting over the hills/ and along the coast, I returned to this place.

J. B. STEERE

Letter LX [Peninsular Courier and Family Visitant, 12(9), February 28, 1873]

FOREIGN CORRESPONDENCE

Number LX

GUAYAQUIL, EQUADOR, Jan. 17th, 1873.

I spent nearly three weeks at Tum-/bes during the time hiring a whale/ boat and going up the bay to point/ Hambali [Jambali], in search of sea shells. We/ passed two nights camped on the/ beach, and in reach of beds of oysters/ that are left dry at low tide, so that/ we had plenty of them, eating them/ from the shell or roasting them over/ the fire. I made a pretty good collec-/tion of birds, shells, fish, snakes, etc.,/ and then hiring a horse to ride and a/ couple of donkeys – one for the bag-/gage and the other for the boy who/ acted as guide – I set out for Equador./ We started at daylight, the boy taking/ the head to point out the way, followed/ by the donkey with the baggage, I/ bringing up the rear, and riding tilts/ at the baggage donkey with a sharp/ stick, he being determined

without/ such attentions to stray from the right/ way. We passed for several hours/ among low hills, sparsely covered with/ cacti and scrubby trees of Palo Santo,/ the weed of which is sweet scented/ and is burned in the churches and be-/fore the images of the saints. As we/ went on the timber gradually increase-/ed in size, and all at once the trees/ that were nearly leafless, on account/ of the long drought, were covered/ with long gray moss that made quite/ a shade, it covered them so thickly./ We now crossed the dry bed of a/ river that is the boundary between the/ Republics of Peru and Equador, and/ about the middle of the afternoon/ came to the little village of Arenillas,/ in the territory of Equador./

Arenillas is said to be twelve leagues/ from Tumbes, though I could hardly/ believe it so far. The houses of the/ village are all set upon posts eight or/ ten feet from the ground, giving them/ a curious appearance. This country/ is not subject to floods like the lower/ Amazon, where they follow the same/ custom, and the ancient Indians of this country likely built so for security/ against snakes and tigers, and the/ people now build so because their/ fathers did./

The next day we passed on through/ a low country covered with vines and/ brush, with many little fields of tobac-/co and plantains that seemed to be/ cultivated with considerable care./ The country appeared much like that/ of the Anazon, low and rich, but now/ suffering from lack of rain. On the/ way we found and shot a couple of/ large, howling monkeys that were in/ a tree immediately over the path./

About noon we arrived at Santa/ Rosa, a town of six or eight hundred/ inhabitants, with the houses all perch-/ed on stilts like those of Arenillas. I/ here found Dr. Hatch, a Massachusetts/ Yankee, who came here and married/ over twenty years ago. He has been/ here so long that he has almost for-/gotten his native language, he address-/ed me in mingled Spanish and Eng-/lish. I arrived on the day before/ Christmas, just in time to see a curious/ ceremony of the church that took/ place on Christmas eve. The night/ was as warm as a Fourth of July eve-/ning at home, and it hardly seemed/ possible that the people at house were/ busied with Christmas trees, and per-/haps with all out doors buried in snow/ and sleet. A little arbor of palm leaves/ was built before the church door, and/ a number of images, representing the/ birth of Christ in the manger at Beth-/lehem, were arranged upon a table/ under it. After waiting here a few/ minutes, a procession came down the/ street, led by the priest in his robes/ and lighted by torches. It consisted/ of twelve or fifteen girls and boys of/ from six to twelve years of age, dress-/ed up in fanciful costumes with crowns,/

scepters and shepherds crooks, one/ boy, having wings upon his shoulders/ and a blackened face, seeming to re-/present the evil one. They were called/ pastores or shepherds, and were come/ to celebrate the birth of the Savior./ A lttle platform was made before the/ arbor, and the boys, one after another,/ were helped upon it, when they made/ little speeches, recounting the glories/ of the coming kingdom of Christ and/ the defeat of Satan, whereupon that/individual, as represented by the black/ faced boy, set up an outrageous how-/ing, and was finally driven from the/ scene with blows of the scepters and/ crooks. The boys went through their/ parts in much the same style, but with/ rather more confidence than American/ boys show at Sunday school and com-/mon school exhibitions, and it was/ now the little girl's turn. The lights/ of the procession had now turned low, and I could see in the crowns of the/ boys and in great strings about the/ girl's neck, the large fire beetles of/ the country that each give light/ enough to read by. As the little girls/ lisped their praise to the little child/ and his mother, these living diamonds/ shone and glistened as no real prec-/ious stone ever did, and finally one/ large one getting free, hovered for a/ while like a star of the East above/ the manger, and then wheeling higher/ and higher, until it reached the top of/ the church tower and then sailed/ away. Each little girl, as she finished/ her address, threw a handful of flow-/ers upon the image of Christ and his/ mother, and then all forming a circle,/ danced around, throwing flowers as/ they passed, and sang little hymns/ much like some of our Sabbath school/ songs. They then formed in two lines/ before the arbor, and dancing to a/ slow and measured stop, the two that/ led the tiles would advance, and fall-/ing upon their knees, one would ad-/dress the Christ child in some such/ words as these: "Niño Manuelito, | aqui traigo este cuñito por [sic] que tel descances tu corpito," - "Child Immanuel, here I bring thee this little/ cradle that you may rest your little/ body." The other would present, in/ almost the same words, a little mat-/tress, (colchoncito), when the two/ would rise and, dancing backward,/ would pass between the lines, taking/ their place in the rear, and two more/ would advance in the same way and/ present other things - pillows, play-/things, and everything that an infant/ is supposed to need. After this a/ frame work with a skin and a pair of/ horns stretched upon it to represent a/bull, and with a boy under it to carry/ it, rose up before the manger and/ danced with the shepherds; but, like/ a true Spanish bull, it could not re-/frain from a few passes with its horns/ at the shepherds and shepherdesses,/ which were warded off in cavalier/ style. After this the performance/ broke

up to give place to a midnight/ mass. The whole affair seemed to be/ well conceived and executed, the only incongruity seeming to be the squeak-/ing of a couple of violins that plyed/ all the interludes, and reminded me of/ a backwoods ball. The rest of the/ night and the next day and night were/ spent by most of the inhabitants of/ Santa Rosa in getting drunk and/ happy from the sugar cane and flavor-/ed with anise. I was kept awake/ nearly all night by the noise at a/ drinking establishment opposite. One/ fellow sang to a most melancholy and/ monotonous tune the following words: "Soy Peruano y muy valiente, soy! Peruano y muy valiente," - "I am a Peruvian and very brave," - singing/ the same words hour after hour, and/ beating time with his fists upon the/ bench before him. The next morning/ when I got up he was stretched upon/ the stones of the sidewalk opposite,/ his valor having all departed./

According to common report the/ government of Equador is in a still/ worse condition than that of Peru, it/ being governed by a dictator who has/ deposed two lawfully elected presi-/dents, and though pretending to gov-/ern by a constitution, in reality gov-/erns more absolutely than the Czar of/ Russia, shooting without judge or jury/ those he suspects of conspiring against/ him, or banishing them to the wilds of/ the Napo beyond the mountains. The/ people complain heavily of taxes, a/ direct tax of a tenth of all produce be-/ing levied for the Church, beside one/ hundred weight from the first seven/ hundred produced; beside this there/ is an income tax, a special tax upon/ the making and sale of spirits, and/ immense export and import taxes to/ be paid; but with all this the people/ seem to be much more industrious/ than the Peruvians, it seeming as if/ the heavy taxes were an incentive to/ industry rather than the contrary./

Peru, and several other of the South/ American republics, have adopted a/ system of decimal currency that is/ almost identical with that of the Uni-/ted States, differing only in the names/ of the coins; but Equador still uses the/ old peso of eighty cents value. The/ silver money of nearly all nations is/ found here, American silver being/ perhaps the most plentiful, and after/ this Chilian, Peruvian, Bolivian, and/ French and Italian./

The people, as far as I have seen/ them, seem to be as thoroughly mixed/ with Indian and Negro blood as the/ other South American people, and it/ is not best in any of these countries to/ speak of purity of blood./

After a few days spent in hunting/ about the village of Santa Rosa, I went/ twelve or fifteen miles up the river to/ the hacieda [sic; hacienda] of Biron

[?], passing through/ large plantations of cacao and plan-/tains on the way. Biron is just at the/ foot of the mountains, and cooler than/ Santa Rosa. Its proprietor, Señor/ Silva, had been a sailor and spoke/ some English. I spent three or four/ days in making a collection of the/ birds there, and one day went into the/ woods a long distance with a peon as/ a guide, coming back at night tired/ out and loaded down with monkeys of/ a large black species, and with a/ species of wild turkey. Señor Silva/ had barbasco - fish poison - prepared,/ and the stream poisoned in my honor,/ and I made a good collection of fishes/ remarkably like those of the Amazon/ in appearance. The barbasco used/ here is different from that used in/ Brazil, being a leguminous shrub, the/ root of which possesses the peculiar/ properties. Soon after this was put/ in the pool, the fish began to rise to/ the top of the water, and men, women/ and children were soon busy in catch-/ing and throwing them upon shore./ One or two small species did not seem/ to be affected by the poison at all./

I first saw here the rubber tree of/ this side of the mountains, and find it/ to be different from the Brazilian rub-/ber, though perhaps of the same bo-/tanical family. The method of gath-/errng and curing is entirely different,/ and it does not appear that the Equa-/torian rubber can be tapped with ad-/vantage like that of Brazil. The milk/ of this tree is quite bitter to the taste,/ and instead of running from the wound/ for several hours in a limpid state,/ coagulates into the consistence of clot-/ted milk as fast as it runs out. thus/ seen closing up the wound entirely if/ small. The method adopted here, and/ apparently the only one practicable/ with this species, is to cut the tree/ down and then cut rings around the/ trunk a foot or so apart, when the/ rubber flows out and adheres to the/ tree in great masses. These are scrap-/ed off and put into a hole dug into the/ ground, and ashes and the juices of/ certain plants put in to complete the/ coagulation. The rubber is very black/ and full of impurities, and sells in the/ market for about one-half the price of/ Brazilian rubber. A large tree will/ produce a hundred pounds, but the/ rubber gatherer must go a long distance/ into the woods to find such tree, and/ the distance is every year increasing./ Señor Silva has a plantation of young/ rubber trees, and though they grow/ very fast, it will be many years before/ they will yield much rubber./

Going back to Santa Rosa, I found/ one of the small vessels of the country/ about to start for Guayaquil, and took/ passage in her. We were three days/ on the way, and the weather so warm/ that we almost roasted. The river/ with its low islands and mangrove/

swamps, the vessel and the people on/ board – all reminded me of navigating/ about the island of Marajo [Marajó], in the/ mouth of the Amazon./

J. B. STEERE

Letter LX [bis]
[Peninsular Courier and Family Visitant, 12(18),
May 2, 1873]

FOREIGN CORRESPONDENCE

Number LX [bis]

QUITO, Febr. 1st, 1873.

Guayaquil, like Pará [Belém], lies nearly at/ the level of high tide, and it has many/ other points of resemblance to the/ metropolis of the Amazon. A low wall/ runs along the front to keep the tide/ in check, and behind this a long street,/ parallel with the river, of business/ houses of two stories, the upper of/ which projects ten or twelve feet/ the lower, and are supported by pil-/lars, making the sidedwalks long, cov-/ered galleries that are very pleasant in/ this land of heavy rains and fierce suns./ Along the river wall are drawn up/ several foreign ships, unloading the/ multifarious things that a country with-/out manufactures of its own has to/ import, or loading with cacao - the/ chocolate bean - or with India rubber./ Great numbers of chatus [sic: chatas], the vessels/ of the country, with one mast and/ square sail, are tied to the bank, and/ a brisk trade is carried on in them in/ the products of the country - plan-/tains, sweet potatoes, aquardento [sic], etc./ Toward the upper end of the town a/ number of rafts of large logs lie at/ anchor, each with its hut and family/ that, like the Chinese, pass their lives/ upon the water, drifting with the tide/ when they wish to change localion./ Back of the first street pavements be-/come rarer, and finally cease alto-/gether. The streets are piled with/ heaps of dirt, the front street only/ being cleaned, and the sweepings, with/ much else not to be mentioned, thrown/ over the well, where the tide gener-/ally fails to take it away. The houses,/ as one leaves the river, degenerate/ fast, being built of mud and cane and/ without whitewash, and in less than/ half a mile one reaches the low, level pampa, at this season nearly covered/ with water. A low line of earthworks/ cross this pampa, probably built to/ defend the town at some time from/ the raids of English buccaneers and/ pirates. Guayaquil has suffered from/ many such, as the Spaniards refused/ for a long time to allow the inhabitants/ to fortify the

place, and the English/ had but to sail in and burn and plun-/der at their pleasure. The people still/ reckon time from the most remarkable/ of these, giving their dates a conspic-/uous place in their calendars of feast/ days and other remarkable events. Guayaquil is the dirtiest place I have yet seen in South America, and with/ its climate the wonder is that its peo-/ple do not all die off./

I was reminded every day of my/ stay that I was not in a free country and/ a republic, by seeing three or four/ companies of soldiers marching up and/ down the streets, with a band of music./ This is a practice that seems to be/general in the cities of South America,/ and it may be from two reasons: one/ the old idea of tyrants, that the people/ must be kept amused to keep them/ from revolution; the second, to keep/ them in awe of the government by/ showing them its strength. The peo-/ple of Guayaquil can be but little edi-/fied by the display of these soldiers, as/ they are a most villainous-looking set/ of Negroes, Indians and half whites,/ dressed in portions of cast-off English/ uniforms, but all alike in great leather/ hats or helmets with brass fronts, that/ seemed enough to bake the brains of/ an ostrich in that climate./

The climate of Guayaquil seems/ worse than that of the Amazon, the/ variations of temperature being much/ greater likely from the fact that the/ atmosphere is drier, the everlasting/ humidity of the air upon the Amazon,/ like a wet blanket, keeping the tem-/perature at almost the same degree,/ night and day and the year round./ The rainy season had just fairly com-/menced as I left, and there was a suc-/cession of drenching rains and scorch-/ing suns./

Several small streamers, much in/appearance like the old fashioned ferry/ beats of our western rivers, lay in/ front of the city, and are used to navi-/gate the river and its branches; but I/ could find no one who know their time/ of sailing, this seeming to depend up-/on some natural law too intricate for/ human wisdom to fathom; but finally,/ after a week's waiting, I found one/ that was to go to Bodegas, and get-/ting my baggage on board at nine/ o'clock at night, we started. There were no state rooms nor beds, the/ only sleeping accommodations for the/ twelve cabin passengers being two/ hammocks; so resigning my individual/ title and interest in the twelfth part of/ the two hammocks for the night, I/ unfolded my blankets and camped on/ the floor, being only waked twice dur-/ing the night to take coffee with the/ other passengers./

Morning found us slowly making/ our way up between low banks, culti-/vated at frequent intervals in plan-/tains, sugar cane and cacao; but for/ the greater amount of cultivation I/ would have believed myself passing/ through among the low islands some/where in the lower Amazon, there/ being the same low, dreary landscape/ of jungle, the same trees and floating/ plants, and even the same yellow/ water./

At noon we arrived at Bodegas, or/ Babahoya [sic; Babahoyo], the port of Quito during/ the dry season, and a place of five or/ six hundred inhabitants, most of whom/ live in houses of bamboo, or cane,/ covered with palm leaves, and all stuck/ up eight or ten feet above ground on/ posts, so as to be out of reach of the/ annual flood./

I found here an American, Mr. Mc-/Kenzie, who immediately bestirred/ himself to find transportation for me/ toward Quito, as he had done before/ for Professor Orton, and innumerable/ other Americans who have undertaken/ the journey. The river was rising/ rapidly, and the country becoming/ flooded so that the arreiros [sic; arrieros] had almost/ stopped coming down so far as Bode-/gas, and I expected to be compelled/ to hire a canoe to Savaneta, some/ twelve or fifteen miles above; but next/ morning we found a man with some/ mules which he was already loading/ for the return trip, and hastily making/ a bargain with him, we started. The/ first day we passed through a low, flat/ country, much of it covered with wa-/ter, in some places so deep that it came/ up to the saddle. The country back/ of the road seemed to be a wilderness;/ but immediately upon the road there/ were many people, many of them hav-/ing small pastures of coarse grass, to/ hire to the arreiros [sic; arrieros] from the moun-/tains. Plantains and sugar-cane grew/ in abundance, and before almost every/ house were hung several bunches of/ plantains, for sale, each of the value/ of a medio - five cents. The second/ day we began to climb the valley of/ the small river, and that night we were/ high enough to sleep cold, though we/ were not yet out of the region of/ plantains and sugar cane. The third/ day we were continually climbing, the/ roads never good, having been cut out/ by the rains, and made so slippery/ that the mules were continually falling/ with their loads, and then the arreiros [sic; arrieros]/ would lift and shout until they got/ them on their feet, only to go over the/ same performance a little farther on./ We passed several dead mules and/ horses that had been recently killed/ by those falls, and after being thrown/ into the mud once or twice, I climbed/ the rest of the way on foot. Just be-/fore night we arrived at the table lands/ above and the little village called/ Camiño [sic; camino] real, consisting of eight or ten/ grass-covered huts. It was raining,/ and the clouds and mist were driving/ right along the ground, and hiding/ anything that might

have made the/ scene a little more pleasant, and leav-/ing nothing but the dripping little/ mud cabins with the black mud a foot/ deep all about them and almost in/ them. I rode up to the first one of/ them, and inquiring for something to/eat, the woman promised to make me/ some locro, or potato soup, and invited/ me to dismount. The one little room/ was not large enough to hold me with/ the rest of the occupants; so I sat/ down under the eaves upon a stick of/ wood and waited for my supper. The/roof was supported by posts made of/ trunks of two ferns that gave quite an/ artistic effect with their curious lines/ of scars where the leaves had fallen/ off. After half an hour's waiting a/ pleasant looking girl of ten or twelve/ years of age, and nearly white, though/ dressed in the coarse blue woolen cloth/ of the Indians, brought out a little/ box and placed it on the ground be-/fore me, and then my potato soup./ After supper I could look upon the/ scene of mud and clouds and misery/ with a little more complaisance, and/ set about finding a dry place for my/ bed. The most of the cabins had no/ floor but the earth, and this now reck-/ing with moisture; but I finally found/ the house of the principal man of the/ village that possessed two rooms, one/ of which was floored with puncheons./ They were holding a feast here, and/ were already well gone in drunken-/ ness; but they vacated this apartment/ for me, though the cold, the swarms/ of fleas and the Jollity in the next/ room did not allow of much sleeping./ The next morning the mist had clear-/ed away, and I found we were in an/ elevated country of rolling lands, cov-/ered with low, scrubby timber, among/ which the cascarilla tree115, from the/ bark of which quinino is made [sic], is quite/ abundant, and everything covered with/ mosses and ferns. In the distance be-/hind a range of low mountains rose/ the snowy dome of Chimborazo, the/ first time I had seen it, though in the/ dry season it can be seen from Guaya-/quil and the sea. After passing for/ two or three leagues through a wood-/ed country with few inhabitants, we/ came out into cultivated lands, ex-/tending as far as we could see on/ either hand. The cultivation reached/ even to the tops of the hills and moun-/tains, only leaving here and there a/ precipice of bare rock untouched. It/ was a very pretty sight, this great ex-/tent of mountains and valleys, in all/ the variey of forms that nature gave,/ and all covered with the little patches/ of brown plow land, and the green of/ the corn, barley and pasture.

The/ fields were not generally more than/ two or three acres in extent, and much of the land had a cabin upon every/ ten acres. It seemed to be spring/ time, and many were plowing with/ cattle and wooden plows, or planting,/ while Indian boys and girls were tend-/ing a few sheep or pigs./

The inhabitants seemed to be nearly/ all pure Indians, and it is the first time/ I have found them living in anything/ like independence and thrift since I/ came to South America. Several vil-/lages were in sight in the valleys, with/ their churches, and as we went on we/ met the country people with mules and/ donkeys loaded with potatoes, going/ to market. Spring must follow close/ upon autumn here, as they were dig-/ ging potatoes in several places, gener-/ally fifteen or twenty men and women/ being at work together, sitting upon/ the ground and digging the potatoes/ out with sharp sticks. The old prin-/ciple of community of labor which/ was perhaps taught them by the Incas,/ or at least made much use of it con-/structing roads, ditches for irrigation,/ and other public works, seems yet/ strong with them, and whenever it/ is possible they will get together when/ they have labor to

After passing for fifteen or twenty/ miles through this thickly settled soun-/try, we came to Guaranda, a paved/ town of two or three thousand inhabitants, near the foot of Chimborazo,/ and the end of the first stage, it being/ necessary to hire a new set of mules/ from here to Quito./

The climate of this cultivated country seemed to me about like that of/ the first of May at home. Frosts are/ rare, and there is enough rain so that/ there is no need of irrigation. The/ weather is so cool that the crops are/ very long in maturing; but they seem/ to be of good quality, especially the/ potatoes.

J. B. STEERE

Letter LXI [Peninsular Courier and Family Visitant, 12(19), May 9, 1873]

FOREIGN CORRESPONDENCE

Number LXI

QUITO, Febr. 1st, 1873.

After two days' waiting in Guaran-/da for mules, I finally engaged a couple,/ and sending my baggage on with one,/ I followed alone the next morning,/ leaving Guaranda at daylight. I fol-/lowed a new mule road

¹¹⁵ Cascarilla – The cascarilla (Croton eleuteria, Euphorbiaceae) bark is used in medicine as an aromatic tonic for the stomach and has also been used as a substitute for the Cinchona spp. (Rubiaceae) bark from which quinine is obtained.

that wound/ around the mountains gradually rising,/ and leaving the inhabited country far/ below. After passing through a belt/ of country covered with low, bushy/ timber, I came out above upon the/ paramo, or cold, grassy plain that are/ found above the timber level. The/ grass is a coarse, long bunch grass,/ that is used by the people for thatch-/ing their houses, as well as for pastur-/age for their animals. The scenery/ grew rougher and wilder, masses of/ rock standing out here and there in/curious shapes, and finally, about noon,/ I passed the range of foot hills, and/ stood upon the Arenal, a great plain/ of sand, made by the decompositionb/ of pumice stone, and reaching far up/ the side of Chimborazo that now stood/ just before me, its snowy dome glit-/tering in the sun. Far up the side I/ could see the valley where Humbolt [sic; Humboldt]/ tried tro reach the top and failed. The/road here passes at an altitude of, I/ think, about sixteen thousand feet,/ nearly up to snow level. It passes/ around upon the east or left side of/ the mountain, and I could soon see,/ far below, cultivated valleys, and in/ the distance the town of Riobamba./ After crossing the Arenal, the road/ again leads through the grassy para-/mo, and in one place several llamas/ were being tended with bundles of the/ long grass. I was vey much inter-/ested in these miniature camels; with/ their long necks stretched far in ad-/vance, they examined everything with/ their large, innocent, intelligent eyes./ They were generally a sort of brown-/ish buff color; but several were spot-/ted with white and black, and they/ seem to vary in color and size like all/ other animals that have long been/domesticated./

As I followed on, I could not keep/ my eyes from the great mountain, and/ I longed for an opportunity to try to/ climb it; but without companions and/ with other unfavorable circumstances,/ I had to content myself with wishing./ Upon the side toward Riobamba it/ seems to be much steeper than upon/ the others, and from many of the pre-/cipices were hanging icicles, and in/ one place among the fields of snow I/ could see a genuine little glacier,/ though, perhaps, if it could be once/ reached, it would not be found so/ small./

The storms are said to be frightful/ along this road at some times, when/ sleet and snow come down the moun-/tain side, covering the paths and blind-/ing and benumbing the lost traveler/ who is so unfortunate as to be pass-/ing. Two or three skeletons and skulls/ beside the road, with a rude wooden/ cross, told of such accidents to some/ who had no friends to bury them./

Passing one or two tambos built of/ mud and stone, where potato soup is/ sold, and a corner upon

the earth floor/ given to the travelers who can get no/ farther, and crossing several deep/ ravines leading down from the moun-/tain, I came out upon a great plain/ still too high for cultivation and cov-/ered with the bunch grass of the para-/mo. Soon after striking this plain, I/ came upon the great *Carreteira* [sic; carretera], or wagon road, that the present president/ is building to connect the capital/ Quito with Guayaquil. The road bed/ is over twenty feet wide, and paved/ with stone in bad pieces, with great/ ditches on each side to keep off the/ surface water. Over the streams and/ ravines are solid stone bridges of the/ most durable construction./

I had not traveled many miles over/ this road before I began to review my/ hasty opinion of the President of/ Equador, and to think that a man who/ is making works of such value to his/ country, and who spends all his time/ and money in carrying them, must/ certainly mean well, and may be ex-/cused for his harsh measures on the/ plea that this people are not fit to/ govern themselves. The more I see/ of these South American Republics,/ the more I am convinced that it is not/ all people that are prepared to govern/ themselves. Few do it, except in/ name, and among the rulers who have/ grasped the supreme power by cor-/ruption, bribery, and revolution,/ President Garcia Moreno¹¹⁶ stands the/ highest./

After eight or ten miles' ride along/ this great road, and over a pampa/ without inhabitants, I began to see a/ few cattle and horses, and then here/ and there the huts of the herdsmen/ and the corrals near them, formed by/ digging deep ditches disclosing small/ plots of ground, into which the ani-/mals are driven at night and watched,/ as thieves are abundant./

I expected to reach the village of/ Mocha before night; but dark came/ and found me still on the cold paramo./ The road began to descend, and I/ crossed a bridge over a stream that it/ was too dark to see. I thought that/ I had gone far enough to have reached/ the town, and I was too tired to go/ much farther, and

¹¹⁶ Garcia Moreno – Gabriel Gregorio García Moreno y Morán de Buitrón was born in Guayaquil on December 24, 1821. He served twice as president of Ecuador (1859-1865 and 1868-1875). In 1869 he founded the Conservative Party. He was noted for his conservatism, Roman Catholic religious perspective, and rivalry with the Liberal Party. During his administration Ecuador became the leader in the fields of science and higher education in Latin America. Part of the animosity Garcia Moreno generated was because of his friendship toward the Jesuits. This and many similar acts encouraged the anti-Catholic parties of Ecuador, especially the Masons, to see in him an inveterate enemy. He was killed in office by a machete-wielding ecuadorianized Colombian citizen called Faustino Rayo, on August 6, 1875 (see Berthe, 1889; Loyola, 1945; Maxwell-Scott, 1914; Smith, 1965).

the horse entirely/ used up, so that I had driven him/ ahead of me for the last few miles;/ so seeing a light near the road, I went/ up to the wall and called for entrance./ At this the light was put out, and all/ quiet; but I was tired enough to be/ desperate, and going to the high/ wooden gate, battered at it with the/ butt of mu gun as if I would knock it/ down. This soon brought two or three/ women and after them the man of the/ house, who apologized for not admit-/ing me sooner, and gave my horse/ some alfalfa, and me a place to spread/ my blankets, and I was soon asleep,/ without supper, having ridden nearly/ fifty miles that day, and passing the/ whose paramo of Chimborazo without/ stopping, and much of the way under/ such roads as those who have experi-/enced them can imagine./

The next morning showed me that/ I had again got down to a country of/ potatoes, corn and barley; but it/ seemed to be autumn here, as the peo-/ple were still harvesting their barley./ I rode back to Mocha that I had/ passed in the night, as it was at one/ side, and got my breakfast, and then/ after three hours' ride arrived at Am-/bato, a town of three or four thousand/ people, and with paved streets./

Coaches already run from this place/ to Quito, and it has a couple of hotels,/ where one can get some of the com-/forts of life. The next morning I met/many of the Indians of the country/ coming in with their produce on their/ backs or upon donkeys, and in one/ place a beautiful llama with a load of/ fine brush, which is used here for fuel./

From Ambato to Latacunga – seven/ leagues – the soil is light sand, the/ product, apparently, of the disintegra-/tion of lava and pumice stone. It is/ all under cultivation, and has been/ cropped so much and without manure/ that it has become very poor, the corn/ tosseling within two feet of the ground,/ and it was too poor in some places to/ raise corn at all, and was planted to/ lupines, peas and quinua. The lupines/ are very bitter until they have been/ well soaked, when they are perfectly/ tasteless, but are eaten in large quan-/tities. There were often gangs of/ twenty and thirty Indians, men and/ women, hoeing corn together in the/ corn fields, and these were often using/ great wooden hoes as broad as the/ blade of a shovel./

The road passes along the high/ land, the river cutting through to a/ depth of several hundred feet below,/ and I could look over a large extent/ of cultivated country on all sides. The/ hills here are so smooth and so free/ from timber that they look artificial,/ and appear to have been cropped with/ the scythe. The only trees were low,/ thick-topped, black cherry trees, scat-

/tered here and there over the fields,/ and apparently of the same species as/ that at home. At the huts along the/ road women offered for sale chicha,/ bread, little sweet pears, and large/ strawberries that seemed to be rather/ wanting in flavor./

Latacunga, which stands near the/ foot of Cotopaxi, is about the same in/ size and appearance as Ambato; but/ a fair was in progress when I arrived,/ and the streets and plazas were full of/ Indians in their bright-colored pon/chos, and all chattering Quichua as/ fast as they could. In one place were/ the sellers of native pottery, in another/ potatoes and the course flour of the/ country; upon one side were the sell-/ers of salt, a government monopoly,/ and very dear and of poor quality,/ being found along the coast and used/ without purifying; and on another the/ ponchos and coarse woolen cloths/ made by the Indians, and near these/ the merchant of dyes, with baskets of/ indigo and cochineal and his little/ scales. Passing among the crowd/ were persons selling girdles worked/ in bright colors, and woolen hats made/ in the country, and oil cloth covers,/ for them a very useful article during/ the rainy season./

Upon one side of the principal plaza/ was a large stone church or cathedral/ that had been partly thrown down by/ an earthquake. Upon this several/ persons in ponchos were at work, leis-/urely laying stone, while others below/ were cutting a light species of lava or/ pumice stone into cornice and orna-/ments./

About noon a band of music, fol-/lowed by four strapping Indian girls,/ who carried on their shoulders a cov-/ered litter with a life-size image of the/ virgin, and by four men who carried/ an image of the Savior, drew up in/ front of this church, and amid the/ ringing of all the bells of the town,/ set off through one of the narrow/ streets toward the country, followed/ by the greater part of the people who/ covered up their wares, or left them/ in charge of their friends, to join in/ this peaceful crusade./

Outside the town there is a quarry/ of pumice stone, and here the process-/sion marched, when all loaded them-/selves with stone, carrying it in sacks,/ or on their shoulders, or even in their/ arms. I saw several women with chil-/dren in their arms and a load of stone/ upon their backs, and old men with/ canes, but all carrying stone to rebuild/ the cathedral. They were marshaled/ by the alcaldes of the town and of the/ different villages from which the [sic, they] came,/ each with his cane, the staff of office,/ and they marched back in double file./ I calculated that there were at least/ three thousand in the procession, it/ reaching from the cathedral to the/ quarry outside of town. As they came/ near the wall of the cathedral, they/

threw the stones down in a great heap,/ where others were standing to toss/ them over the wall, and then returned/ to their trafficking, each likely with/ the comforting feeling that he had/ done a meritorious act, and deserved/ success in trade for the remainder of/ the day./

I particularly noticed a man with a/ cheap picture of the holy family, cov-/ered with glass and framed in tin. He/ was passing about from one group to/ another, zealously presenting the pic-/ture to each person, it being generally/ received with the greatest reverence/ and with bared head, and devoutly/ kissed, and then passed around all/ over the merchandize, perhaps to ward/ off the "evil eye," or to call purcha-/sers. After this the poor potato seller/ who had thus blessed her potatoes,/ would drop one in the picture man's/ basket, the flour seller would give him/ a little handful, and he would pass on/ to others. He seemed to me to be/ particularly zealous in visiting the/ salt sellers, perhaps from the great/ value of this article, and I don't think/ he left one basket unblessed and un-/tolled. He also visited the sellers of/ alfalfa, the clover of the country, and/ they pulled little locks from the/ bunches that were to be sold at a me-/dio each, the consequence of the pious/ act thus falling upon the buyers, they/ being, like some greater and wiser/ men, very generous with the property/ of others./

Just as night came the clouds cleared/ away from the southern sky, and I/ had a view of a beautiful, conical-/shaped mountain, that I supposed was/ Cotopaxi; but upon inquiry found it/ was Tunguragua [sic; Tungurahua, that is famed as/ being even more symmetrical than/ Cotopaxi./

Between Latacunga and Machacha,/ the next town, the country became/ wilder, the mountains being more/ broken in their outlines, and covered/ here and there with timber. I was/ passing between Cotopaxi and Illinisi,/ but I could only now and then get a/ glimpse of their snow-covered sum-/mits, they being continuously covered/ with clouds, and lightning flashing/ from Cotopaxi every few moments./ Toward Machacha the road rises up/ again to the bleak paramo, and here I/ was overtaken by the wind and rain,/ and rode into the town thoroughly/ wet and chilled, and with my baggage/ far behind./

The next day I had but seven leagues/ to ride to reach Quito; but my horse/ was about used up, and at the end of/ the fifth league gave out entirely, and/ I led him into the city, carrying my/ gun upon my shoulder./

The people of Quito seem to have/ seen very few strangers, especially/ bearded ones, as they were very much/ astonished to see me passing through/ their

streets, and perhaps I did pre-/sent a rather comical appearance; but/ I pretended they were as curious as I/ was, and stared at them in returm./

J. B. STEERE

Letter LXII [Peninsular Courier and Family Visitant, 12(22), May 30, 1873]

FOREIGN CORRESPONDENCE

Number LXII

QUITO, Febr. 15th, 1873.

I was much disappointed in the size/ and appearance of Quito. The eighty/ and one hundred thousand inhabitants/ as given by the geographers should at/ least be diminished by one-half. It is/ situated in an irregular valley, at the/ foot of the mountain, or cluster of/ mountains, called Pichincha. The/ streets are narrow and crooked, and/ the houses generally bare, bleak edi-/fices of brick or adobe, often of several/ stories, but without pretensions to/ regularity or beauty. Most of the/ public squares or plazas are bare plates/ of earth or stone pavement, and cov-/ered with the tents and stalls of the/ sellers of fruits and vegetables. They/ generally have a fountain in the cen-/ter, and a characteristic scene of Quito/ is the Indian water carrier filling his/ huge earthen jar from one of these/ fountains, and carrying it off on his/ back, with a band passing over the/ forehead to support it. The plaza in/ front of the palace is planted to flow-/ers and trees, there being roses and/ pinks, and most of the other ordinary/ flowers of the temperate zone, while/ the only tree are willows, and their/ effect is rather monotonous./

I made very pleasant acquaintance/ with the American Minister, Colonel/ Rumsey Wing, of Kentucky, and in/ company with his secretary, Mr. De/ Forrest, visited the Jesuit College and/ church, as well as some of the other/ old churches of the city. There are a/ large number of German Jesuits here,/ who have found what they were de-/nied in Germany, — a house and pro-/tection, — and they seem to be taking/ thorough measures for the future edu-/cation of the young men of Equador [sic]./ The museum of natural history is al-/ready well begun with a collection of/ birds, fishes, etc., etc., brought ready/ mounted from Paris, and a young/ German is busily at work mounting/ the large number of birds and mam-/mals found in these regions. He has/ already mounted a couple

of tapirs, a/ llama, some deer, and a most beauti-/ful collection of the humming birds/ that are found in such variety and/ beauty in Equador, and they are so/ arranged that the light is reflected/ from them, giving them the appear-/ance of a collection of precious stones/ of all hues./

The professor of chemistry, a young/ blue-eyed German "padre," showed/ us through the laboratory, which was/ filled with the most delicate chemical/ apparatus that had lately come from/ Germany, and, strangely enough, had/ passed the mountains upon the backs/ of mules in almost entire safety. The/ young professor was an enthusiast in/ his study, and as described to us/ in broken Spanish the work he intend-/ed to do in analyzing the minerals and/ gases of the volcanoes, and in exam-/ining the essential properties of the/ many strange plants that this country/ affords, it seemed hardly possible that/ such as he could be dangerous mem-/bers of any well-arranged and well-/ governed community. He gave the/ youth of Equador credit for aptness/ in learning, but complained that they/lacked in ambition and application./ He had one student who had nearly/ reached a point in his studies at which/ he could have made them useful in/ gaining a public position; but all at/ ease, without other reason than whim/ or caprice, stopped his studies and aimless/ life followed by nearly all the youth/ of this country, who have means/ enough to keep themselves from the/ pangs of hunger./ His pupils are now/ all studying the most elementary parts/ of the science./

As we went from the part of the/ building devoted to teaching into the/ chapel or church, we found ourselves/ in an immense room, with walls cov-/ered with paintings, most of them/ likely copies made in Quito of the old/ Spanish masters; but some of them/ undoubtedly genuine. They are gen-/erally in a bad state of preservation,/ and mostly of such ghastly subjects as/ "The Last Judgment," and "The/ Ressurection of the Dead," and one/ immense painting represented the suf-/ferings of the wicked in torment after/ death. As it seemed to me, almost a/ pictorial representation of Dante's/ "Inferno."/

As we passed out, we found at the/ door a crowd of twenty or thirty beg-/gars, waiting for the daily alms given/ by the Jesuit fathers. Beggars are/ one of the peculiar institutions of/ Quito. Several leagues outside of the/ city I found old men and women kneel-/ing by the roadside, and with clasped/ hands begging alms in the name of all/ the saints, and in the city they are/ met at every turn. Several make the/ daily round of the hotel at which I/ stop, calling at every door, and beg-/ging in all the shades of voices, from/ humble trembling and prayer to impu/dent command. As I

entered one of/ the old churches, and was standing, hat in hand, looking at the old paint-/ings, I saw a woman come in who,/ after crossing herself with holy water/ and bowing before the image of Christ/ before the door way, came up to me,/ and putting her hand upon my arm,/ begged of me, in the name of the holy/ Sacrament and the sacred house in/ which we were, to give her alms./ And all this misery with the necessi-/ties of life at less than half their price,/ upon the coast./

After a few days here I arranged a/ trip to the crater of Pichincha with/ Colonel Wing's secretary. At a dis-/tance, Pichincha appears to be several/ mountain peaks, all situated upon one/ base, and it may well be what some/ scientific men have supposed the re-/mains of a great volcano, much larger/ than Cotopaxi, that has been burned/ out and fallen in, giving it the irregu-/lar appearance it now has. Several/ of the peaks and points reach above/ snow level, and in one place a long ridge reaches up far into the snow,/ and in this the crater is situated. After/ hiring horses and providing ourselves/ with a good supply of eatables, we/ rode around the base of the mountain/ until we struck a valley that reached/ up toward the crater, and stopped/ here for the night at a little cluster of/ houses, the highest point inhabited./ The cold and the fleas did not allow/ us to oversleep, and early next morn-/ing we set out with three of the half/ Indian race that lived there, to act as/ guides./

A couple of miles' ride up through/ cool mountain pastures brought us to/ a belt of low timber or brush wood,/ among which were many brilliant/ fuchsias, with bright-colored hum-/ming birds flashing about them. The/ path through this was steep and slip-/pery with rain; but a half an hour's/ riding brought us through and above/ to the bleak paramo covered with long/ bunch grass, and reaching up nearly/ to the snow line above. It was so/ steep that we could not go directly/ up, but turned from side to side in a/ zig-zag course, so as ro overcome the/ ascent. An hour's hard work brought/ us to the limit of vegetation, and al-/most to snow level. We left the horses/ here, in charge of one of the arreiros [sic; arrieros]/ and in the shelter of a huge mass of/ volcanic rock, and made the rest of/ the way to the crater on foot, passing/ over pieces of pumice stone and then/ through the snow, in all, perhaps,/ nearly half a mile. We now found/ ourselves upon a sharp edge running/ down toward the interior of the crater/ as steep as snow would lie. The crater/ below was filled with cloud and steam,/ and at first we could only hear the/ roaring of the escaping steam, and/ smell a sulphureous smell very suggest-/ive of the infernal regions; but

the/ cloud soon lifted a little and gave us a/ glimpse of a chaos of rocks, snow and/ clouds of steam rising out of the/ midst./

We now made our way down some-/what to the risk of our necks, as we/ were continually slipping in the snow,/ the descent being so rapid that we/ followed away off to the right, and/ then the guides brought us to the edge/ of precipices several times, from which/ we had to draw carefully back and/ seek a new route. We finally, after/ descending five or six thousand feet,/ reached the first valley, which is per-/ haps three thousand feet below the/ summit, perpendicularly. This valley/ is likely a part of the crater, and at/ times of eruptions has openings for/ the escape of lava; but we could see/ nothing but sand and rock as we were/ again below snow level, while we could/ hear the escape of steam still beyond/ and below us. Climbing a little ridge,/ upon which some one of the scientific/ expeditions that have visited the crat-/er had erected a wooden cross, we/ could see through the braking clouds/ another immense precipice below us,/ and then a valley, from which the/ steam and noise were coming. Our/ guides now denied all knowledge of/ the way to reach this; but finally one/ of them pointed out a narrow valley/ that led directly toward the point from/ which the great volume of steam was/ escaping, and said he thought that was/ the way. As he seemed to know noth-/ing about it, I followed down alone,/ and descended over a quarter of a/ mile over ground so steep that the/ stones I loosened with my feet never stopped, but went bounding on, ever/ increasing in force until, with leaps of/ sixty or eighty feet, they sprang into/ the valley below. Then I found my-/self upon the edge of an almost per-/pendicular precipice of six or eight/ hundred feet in hight [sic]. The stone and/ sand was [sic] sliding from under my feet/ and falling over the precipice, and it/ was with considerable trouble that I/ retreated, and just as I was slowly/ making my way out, I heard a shout/ of warning from above, and looking/ up, saw several large stones bounding/ and flying along down the very path/ I was following, and I had just time/ to crawl behind a large rock that for-/tunately stood near, as they went by,/ and a moment afterwards leaped for/ into the valley below./

After reaching the rest of the com-/pany at the cross above, I found them/ all decided upon returning, the Indi-/ans claiming that there was no way to/ reach the crater below. My nerves/ were trembling a little from the pre-/carious position I had just found my-/self in; but to leave the volcano with-/out seeing the most interesting part -/ the mouths of the crater themselves -/ seemed to be out of the question.

So/ I ordered one of the Indians that/ seemed to have more courage than his/ fellows to follow me, which he did re-/luctantly, and foillowing off to the/ right, after toward an hour's work, we/ found ourselves in the real crater./ This valley was filled with great bould-/ers, and in one place there was a little/ lake, a few rods in length, of beautiful/ blue water. Passing this, we came to/ many small openings among the rocks,/ from which hot sulphurous steam was/ escaping. The rocks about these open-/ings were covered with crystals of/ sulphur; but these were too delicate to/ preserve. The steam came up hot in/ our faces as we climbed over the/ rocks, and in one place the Indian/ guide who was following like a dog/ behind me, gave rather an unsatrical [sic] bowl [sic, howl], and I found that he had scalded/ his feet that were only protrected by/ sandals of agave fibre, and the next/ day he could hardly walk./

Beyond these small openings we/ came to the foot of the largest one,/ where the steam comes out from under/ the perpendicular precipice through a/ vent some forty feet in length and six/ or eight in width. It escapes with the/ force and noise of twenty locomotives/ blowing off steam. Small stones were/ blown out, and were continually strik-ing upon the rocky sides of the gap. The steam rose in an immense column/ to a height of several hundred feet, and/ then spread out like a flat cloud and/ dispersed./

From here we could see an immense/ gap that seems to have been broken/ out of the side of the crater at some/ eruption, and through this, which is/ on the opposite side from Quito, the/ later eruptions have likely expended/ themselves, though Quito has been/ damaged more than once since it has/ been inhabited by the Spaniards./

The guide was begging me to re-/turn, and after a few minutes' obser-/vation we began to climb, and I found/ that though the descent had been dif-/ficult, the ascent was to be much more/ so. Before we reached the cross where/ we had left the others, I was ready to/ drop with fatigue, and then we had/ another long, steep ascent, slippery/ with snow and so steep, that in many/ places we climbed with both feet and/ hands. Every twenty or thirty feet I/ would drop flat in the snow, and the/guide seemed ever ready to follow my/ example. The air seemed so thin that/ it would not support the lungs, and/ after ten steps I would be panting as/ if I had run half a mile. It seemed/ as if that ascent was never ending;/ but finally, after over two hours of/ continual ascent, we reached the top,/ without waiting to sing the Doxology,/ as Prof. Orton is said to have done; / and after a few minutes' descent, that/ now seemed easy from the contrast,/ we arrived

at the big rock, where/ were the horses and the rest of the/ company, who had built a fire and/ made coffee, and were now ready to/ return down the mountain. I had/ brought out with me a few specimens/ of rock, and we now collected a few/ more from the *maseca* [meseta] about us, and/ then mounted and started down, ar-/riving at the village about dusk./

J. B. STEERE

Letter LXIII [Peninsular Courier and Family Visitant, 12(23), June 6, 1873]

FOREIGN CORRESPONDENCE

Number LXIII

CALLAO, March 12th, 1873.

Humbolt [sic; Humboldt] rambled, botanized, and/ observed, when a young man, through/ the valleys and among the mountains/ about Quito, and I had much of that/ satisfaction that small minds take in/ going over the same places and doing/ the same acts that great men have/ done, although the feeling may not be/ peculiar to small minds alone. Quito/ is noted for the number and beauty of/ the humming birds that are found in/ the vicinity, every mountain and even/valleys on different sides of the same/mountain seeming to have special/ species. Encouraged by the number/ of naturalists and collectors that have/ visited Quito, there are several natives/ who have undertaken the killing and/ preserving of these birds as a business,/ shooting them with balls of mud from/ blow guns, so that the plumage is not/ at all injured./

I found in the churches in the in-/terior of Peru, and even in Brazil,/ copies of the saints that were painted/ in Quito, and Mr. Colonel Wing and/ others have made quite collections [sic] of/ paintings of native artists. Some of/ them appear to be of considerable/ merit and originality, though they are/ generally only copies; and there seems/ to be no reason as yet in this part of/ the world to proclaim a renaissance/ of the art. I visited the house of one/ family that have been painters for/several generations. The grandfather/still paints, and his son was engaged/ on a landscape showing some of the/volcanic and snow-covered peaks of/ Equador, which was already sold to/ Colonel Wing, and the grandsons,/ boys of twelve and fourteen years of/ age, seemed to be grounding them-/selves in the rudiments of the art by/ grinding paint, as near as I could/ judge by heir painty faces./

After two weeks pleasantly spent at/ Quito, I engaged mules and set ou on/ my return to the coast. We took a/ road that led us by the very foot of/ the volcanoe of Cotopaxi, and I had a/ splendid view of this conical snow-/covered peak for several hours, when/ thunder clouds again covered it, and/ we rode the rest of the distance to/ Latacunga in a drenching shower./

Dr. Reiss¹¹⁷, a German scientist, has/ just succeeded in reaching the summit/ of Cotopaxi, the first time it has been/ accomplished. It seems much more/ difficult of ascent than Chimborazo,/ though not quite as high. The road-/way where it ends through slight in-/equalities of the ground, brings to light/ much of the past work of this volcano./ The earth is made up, as deep as the/ cuttings go, of strata of pumice stone/ and ashes, separated by their layers/ of black soil, showing that there have/ been many eruptions with periods of/ rest, in which the ashes and pumice/ became decomposed on the surface,/ and supported a feeble growth of/ grass and bushes, as at present, and/ then all was again covered out of/ sight. At the foot of Cotopaxi these/ layers of ashes and pumice were from/ a foot to seven feet in thickness; but/ gradually thinned out as we left the/ mountain behind, though I thought I/ could still distinguish them forty miles/ away near Ambato./

I was not so fortunate this time as/ to pass Chimborazo in one day, but/ was compelled to sleep one night upon/ its side, at the tambo of Chuquipoqui./ This is a grass-covered hut of mud/ and stones, that had been covered in-/side and out with white wash; but/ this has been nearly all cut off to the/ mud below by the passers by in in-/scribing their names with dates, etc.,/ a species of notoriety much cultivated/ by this people. One poor fellow had/ written with trembling fingers, "Paso [sic, pasó]/ 10 de Setiembre, 1861, Francisco Da-/vila, bien muerto con rio [sic, frío]." A literal/ translation of which would be some-/thing like this: "I, Francis Davila,/ passed here on the 10th of September, 1861, well dead with cold." A couple/ of stupid herdsmen were sitting on/ some rocks beside the tambo, catching/ the last rays of the sun as we rode up,/ and they pointed to a grass hut near/ by, in the shelter of a great rock, and/ the exact picture of a low hay stack/ on the outside, as the place where/ travelers could get something to eat,/ driving through a hole that served for/ doorway and window,

¹¹⁷ The german scientist Wilhelm Reiss and the Colombian Ángel Escobar reached the summit of the Cotopaxi for the first time on November 28, 1872. Alphons Stübel did the same in May, 1873.

and as soon as/ I could see for the smoke. I saw a/ woman and a couple of children hov-/ering over a fire which they were feed-/ing with long grass of the pampa/ that seemed to give much more smoke/ than fire. An earthen pot held the/ potatoes and red pepper that was to/ be their supper and mine, and fifteen/ cents procured me a couple of plates/ of this "locro," or potato soup, and a/ couple of boiled eggs; but I had to/ retreat with the tears running, from/ the smoke to the cold outside. After/ supper we set ourselves to prepare for/ the night in the old tambo; but with/ all the blankets and ponchos I carried/ I thought I could begin to feel/ before morning something of the sen-/ sation that caused poor Francis Davila/ to write himself, "well dead with/ cold."/

The next morning a thick fog was/ sweeping down close along the side/ of the mountain, hiding everything/ from view and accompanied by a/ piercing wind that made us shiver/ under our thick ponchos and with our/ faces wrapped up, though I had passed/ before with perfect comfort./

Upon my arrival at Guaranda I/ found that the Carnival was commenc-/ing, and the arreiros [sic; arrieros] could not be pre-/vailed upon to begin a journey at such/ a period; so I had nothing to do but/ to wait until it was over. The festival/ opened with a bull fight at the little/ village of Huanuco [?], just above Gua-/randa; but this was a tame affair, the/ bull being held with two long lassos,/ while the young men rode around him/ and threw other lassos until the poor/ bull was so entangled that he could/ not stand up. I think the laws of/ Equador forbid killing the bulls; but/ the people must have bull fights, even/ if such weak affairs as this. The/ second and third days the streets were/ filled with men and women with/ pockets full of eggs and flour, and I/ think I was the only one in town, at/ the end of the feast, who had not had/ half a dozen eggs broken upon his/ head, and then a plentiful supply of/ flour and bran rubbed in. The door/ and window were spattered with/ eggs, and the coats and dresses of the/ feasters were covered. The drinking/ of Chicha and of acquardiente [sic; aguardiente] kept/ pace with the egg breaking, and at/ the end of the third day the streets/ were filled after dark with a shouting,/ fighting crowd, and something harder/ than eggs were thrown, as a few got/ broken heads. The whites and Indi-/ans seemed to take sides in the quar-/rel, the Indians losing their humility/ under the influence of drink, and re-paying the abusive epithets heaped/ upon them by the whites with blows/ and stones. I could frequently dis-/tinguish such epithets as 'pobre In-/dio," "Indio bajo," "Indio triste," in/ the melee./

At one side of Guaranda there is a/little cluster of Indian huts among/ little corn fields, and upon the hill side/ above several llamas were feeding. I/ went regularly every day of the feast/ to try to buy one of these llamas for/ the museum; but, though they would/ sell those I did not want, I could not/ get a good one. So the last day of the/ feast, when I was just ready to start/ for Guayaquil, I took my gun and/ went into the flock, and before the/ Indians knew what I intended to do,/ shot the llama I wanted. There were/ soon twenty women and girls about/ me on the hill side, screaming at the/ top of their voices, and several men/ who looked rather threatning; but by/ paying them twice what the llama was/ worth, I pacified them, and carried off/ the skin and head in triumph./

The Indians have been treated/ harshly and unjustly in this way by/ the whites until they k now no other/ way, and it is almost impossble to/ deal with them otherwise./

The roads from Guaranda down/ were worse, if possible, than when I/ came up; but after four days, of which/ I have only a confused recollection of/ rain, mud, water, rocks and steep,/ slippery passes, we finally arrived at/ Savaneta, and taking a canoe, I came/ down the same night to Bodegas, now/ under water, the people using canoes/ to pass about their streets. I got to/ Guayaquil just in time to take the/ steamer Trujillo, of the English Com-/pany for navigating the Pacific. The/ commander, Capt. Hall, is an Ameri-/ can, and with several Americans on/board, fresh from New York with the/ latest news, I had a pleasant trip to/ this place, where I am again settled/ in my old room, surrounded with shells/ from Tumbes, fish and monkeys from/ Santa Rosa, birds and plants from Quito, and geological specimens from/ Chimborazo and Cotopaxi./

J. B. STEERE

Letter LXIV [Peninsular Courier and Family Visitant, 12(39), September 26, 1873]

FOREIGN CORRESPONDENCE

Number LXIV

CALLAO, April 11th, 1873

After packing and shipping the collec-/tions made in Equador [sic], as there was no/ ship ready for China, I concluded to make/ a trip up the Oroya Rail-

road¹¹⁸, a road being/ built by Mr. Meiggs, that runs nearly east/ from Lima, following up the valley of the river Rimac [Rímac], and intended, when complet/ed, to connect Lima witrh the rich lands on/ the east side of the Andes and with the rivers Ucayali and Amazon./ Mr. [William H.] Cilley, the Superintendent of the/ road, was just going up the line, and through/ his kindness I passed very pleasantly and/ safely through a wild, rough and unsafe/ country./

The depot in Lima is near the bank of/ the river, where we found waiting a train/ of nice, clean American cars, with all the/ officials from conductor to brakesmen Amer-/ican also. The road through Lima runs/ close along the banks of the river, and un-/der the bridges by which it is crossed. The/ Rimac [Rímac] was now a rouring, rapid but shallow/ stream of over a hundred feet in width, and/ much more worthy the name of a river than/ a few months ago, when it hardly furnished/ water for the washer women seated along its/ bed. This is the time of rains in the moun-/tains, and it now brings down immense/ amounts of mud and gravel./

We were soon outside of the city proper,/ and among the miserable huts of mud and/ cane, covered with oil canvas, where live/innumerable negroes, mulattoes, Indians,/ and half breds in almost as primitive a/ state as the savages of the woods. Great/ heaps of filth, the accumulations of some/ hundreds of years of scrapings of the streets/ and gutters of Lima, lay here and there,/ having settled down into that dry preserv-/ed state that everything reaches here, and/ as we passed they gave out that same old/indescribable smell that one notices at the/ guano islands, and in the ancient burial/ places of the Indians. After a mile or two/ of this, we entered a broad marsh of reeds/ and grass formed by the overflow of the/ Rimac [Rímac], and only waiting a little enterprise/ in draining it to become valuable in this/ country, where potatoes are worth a dime/ apiece, and a pound of meat costs 50 cents./ On the other side of the marsh we came/ into fields of badly cultivated sugar-cane/ and cotton, where gangs of Chinese were/ lazily cutting up the weeds with spades, or/were picking the ripening bolls of cotton./

We could not see the bleak brown hills/ with sued [?] plains at their feet, closing in/ toward the river as we went on, and the/ cultivation became poorer, the cotton and/ cane giving way to corn and alfalfa. Among/ the hills on both sides of the river we began/ to see ruins of ancient towns and fortresses/ of sundried brick, and the remains of stone azequias [sic;

acequias] on the hill sides showed that where/ there was now nothing but sloth and pov-/erty, there had been plenty and countent-/ment./

About thirty miles above Lima we sto-/ped at the little station of Chosica. There/ is a nice hotel here kept by an American,/ and I stopped there several days, while ex-/amining the ancient ruins near./

Just above the station, in a rough valley/ filled with large rocks that have been/ brought down from the mountain above at/ some time when there were torrents of wa-/ter, where now there is not a drop, there is/ an ancient village or cemetery, or both in one. At first sight it appears to be a mass/ of walls and stones, without form of any/kind, and upon closer examination it re-/minds one in its arrangement of the mud/ nests of some species of wasps, there ap-/peraring to have been first pits excavated in/ the earth among the rocks, those being of/ such forms and chance and the position of the/ rocks might give them. These were walled/ up and covered, and over them built others/ of smaller stone, and still above these oth-/ers, all keeping more or less the form of/ the original pit, and those buildings were/ scattered thickly over the rough ground,/ leaving no room for streets, there being/ now and then narrow winding passages be-/tween the walls of the houses, while for the/ rest the roofs must have served for approach./ Those buildings were generally very small,/ often being not more than four by six feet/ in their dimensions inside the walls - mere/ closets. Those had been in almost all cases/ broken open, and appear generally to have/ contained bodies of the dead. From their/small size and the human remains found in/ so many of them, I was almost led to be-/lieve they were nothing more than tumbs;/ but from finding so much of the refuse of/ habitatioin, shells of nuits and fruits, corn/ cobs, charcoal, broken pottery, etc., and by/ afterwards noticing that all of the buildings/ and ruins in the neighborhood were filled/ in the same way with bodies, I concluded/ that the original inhabitants had been ac-/customed to bury in their houses, after-/wards sealing up the rooms and building/ new habitations above./

There were twenty or thirty notes [?] of/ ground covered in this way with remains/ of walls and vaults, in which we could often/ see human bones with pieces of cloth and/ rope; the vaults seeming to have been/ broken open purposely, likely by the dis-/coverers of the country in search of treas-/ure. After wandering for a while among/ the ruins and noticing in what way they/ were constructed and situated, I found a/ favorable looking spot that had not been/ disturbed, and after removing a few shovels/ [illegible line]/ [...] down into a vault some ten feet/ square, and literally

full of what appeared/ to be bundles of old cloth, from two to four/ feet in length, and nearly all standing on/ end, leaning against the walls or each/ other. These were dead bodies that had/ been doubled up, with the knees to the/ breast, and then wrapped in several thick-/nesses of cotton cloth, which were then/ secured by a rope knotted about them to/ keep all snug. Some of the bundles had/ been wrapped in an extra cotton cloth of/ great length, that had been knotted at each/ end of the bundle. We lifted those bodies/ out, and placed them about the mouth of the vault, until we had over twenty-five of/ all sizes, though the most of them were of/ small children. The coverings of some/ had decayed and dropped to pieces as we lifted/ them out, while others were better pre-/served, the dry, parchment-like skin still/ clinging to the bones, while the heads weree/ covered with hair./

We looked in vain in this and other/ vaults for pottery, which is so generally/ buried with the Indians of Peru; but nearly/ every body had wrapped up with it some/ little article, and we could generally tell the/ sex by the quality of them. Many of the/ bodies had buried with them and wrapped/ around their hands or their heads, slings,/ and this was the only instrument of war/ found, while several of the skulls examined/ had been broken, apparently by stones/ thrown from slings. Many of the bodies/ of infants that we concluded must be these/ of boys, had little slings buried with them,/ those of little girls had little sacks and/ sticks for weaving or knitting, and little/ balls of thread, everything in miniature/ that was found buried with their mothers./ I was ashamed of myself to disturb bodies/ that had so evidently been buried by loving/ mothers and friends, even though I claimed/ to be doing it in the cause of science./

One little girl had a small bag of peanuts/ upon her arm, while an infant had been/ wrapped in a swathe of fine cotton, and/ then buried in the arms of its mother, both/ being wrapped in the same cloth./

The men in nearly all cases had sacks of/ cotton cloth filled with coca leaves, with/ little calabashes and lime for eating with the coca, exactly the same articles the Indi-/ans a little further up the valley still use./ In one or two cases the wrappings about/ the women were fastened with course, rough/ copper pins, in the rest with the long, hard/ spines of the American aloe. In several cases these latter had been pierced as to/ be used as needles, the thread still remain-/ing in some of them. About the bones of/ the arm of one woman I found a rude silver/ armlet, and this, with the pins and a couple/ of pairs of rude copper tweezers, were the/ only article of metal that we found. Two/ or three of the women had strings of rude/ bone beads, col-

ored red with cinnabar or annateo [sic; annato], and we found a pair of curious/ shells, covered with spines and protuber-/ances that appear to have been considered/ of great value, for the corpse had been/ buried with them in the hands. There are/ sea shells, though I have not yet seen them/ upon this coast. The cloth was cotton, and/ in most cases course and without figure,/ though we found remains of belts or girdles/ that had been worked and colored with/ much care. I found, as I thought in sev-/eral cases, unmistakable evidence that some/ of the bodies had been rewrapped after the/ original burial, and it is possible that, as/ the vault was re-opened from time/ for fresh burials, sons or descendants may/ have honored the bodies of their ancestors/ by re-wrapping them and giving them new/ honors, the inside wrapping being old and/ decaying, while those on the outside were/ still bright and strong./

After thoroughly examining the first/ vault, we covered the remains again, and/ searched for more; but, though we found/ several, none were in so good a state of/ preservation as the first, though all were/ buried after the same form. In one place/ I struck into a room or cistern very deep/ in the ground, which was some eight feet/ in depth, and six inches in diameter and round,/ the stone walls being carefully plastered/ with mud, while it was covered with flat/ stones and perfectly empty. We could not/ imagine why it had been left in that state,/ unless some chief had made it for a tomb/against the time of his death, and had then/ died in battle in some strange land./

Following up the valley and through the/ town, we came to a building much larger/ and higher than the rest, that had possibly/ served for a fortress. Behind this were/ stone steps leading up to a large space/ nearly free from stones. Here a space of/ some hundred feet in length and fifty or/ sixty feet in breadth, had been curiously/ divided off into larger and smaller oblong/ divisions by lines of large stones, those of/ a longer shape having been chosen, and/ these firmly planted in the ground and/ standing up two or three feet, while they/ were about the same distance apart, mak-/ing a sort of miniature stone binge. The/ wide stone steps leading up to this, with/ the large space enclosed, showed that this/ must have been a place of public use: but/ for what, whether for worship, or games,/ we could not tell. Beyond this there was/ nothing more to be seen but the rough,/ barren hill side, with no sign that it had/ ever been troubled by the hand of man./

After exploring this locality, we rode/ down the valley a few miles, where we/ found another village of the same sort, ex-/cept that there were not so many

stone, and/ the houses were somewhat larger and more/ symmetrical. Behind and above was the/ same enclosed space of stones standing on/ and, as if all the ancient population of the/ village below had here their seats in time/ of council./

The vaults of this town seemed to have/ been more carefully examined than those/ of the first, and we spent little time in dig-/ging. Above and about these villages there/ were but few signs of cultivation, but upon/ the other side of the river we could see/ low rows of terraces upon the hill sides,/ extending for miles./

Crossing the river upon a suspension/ bridge, built after the same plans as the/ ancient raw hide bridges of this country,/ but supported by wire ropes, we passed/ several hours wandering over these terrac/ed lands. There seemed to be several hun-/dred acres in this one plat, the water for/ irrigating it having apparently been brought/ from the river far above in a stone azequia [sic; acequia]/ or ditch, that was carried around the hill/ sides and down the river until the proper/ hight had been attained. The highest of/ these terraced lands seemed to me to be/ nearly or quite two hundred feet above the/ river, and the water had been led down by/ a series of small ditches, until it had irri/gated the whole./

The walls of the terraces were from five/ to eight feet in height, and still stand firm/ and strong. Every now and then stones/ project from the walls, by which to climb/ to the terrace above./ The terraces were/ from eighty to thirty feet wide, and the wider/ ones were crossed here and there by low/ walls or rows of stone, as if to divide indi-/vidual property, though to form the princi-/pal azequia [sic; acequia] and the immense walls must/ have required a strong and well arranged/ system of community of labor. There was/ no village nearer these lands than the one/ across the river; but one ridge or point of/ rocks that just led down upon the hill side,/ whose face was too steep and rocky for cul-/tivartion, had been covered with a large/ building divided up into many small apart-/ments, and this may have served for a gar-/rison to defend the crops growing on the/ hill side below. All was now barren, with/ the exception of now and then a small/ prickly cactus, that made no pretense of/ covering the dry, loose sand./

We could not but contrast the patience/ and the industry that had brought these/ rugged hill sides under cultivation, after/ every corner of the valleys and low lands/ below had been brought to their limit of/ productiveness, with the scene before us – / the terraces as barren as Sahara, while even/ the valley of the river itself was left almost/ desert. There were but

two miserable/ haciendas in sight, with two or three gangs/ of Chinese cultivating the few cultivable/ acres, while the rest was left to grow up to/ woods, and this within thirty miles of Lima/ and food at famine prices. It may well/ be said of Peru that in her riches is her/ poverty. As long as her islands and coasts/ produce guano and saltpeter that foreigners/ will dig out and pay for, so long will the/ Peruvians leave their farms and crowd to/ Lima, where they will quarrel and start/ revolutions that they may get their hands/ in the public treasure, leaving the real de-/velopment of the country until these acci-/dental causes are exhausted. The good old/ way of gaining money by the increase of the earth is too slow for Peruvians, and/ peculation and speculation are even more/ rampant than in the United States, since/ the stealing from the public money will/ come much nearer supporting the whole/ population than at home./

J. B. STEERE

Letter LXV [Peninsular Courier and Family Visitant, 12(40), October 3, 1873]

FOREIGN CORRESPONDENCE

Number LXV

CALLAO, April 13th, 1873

From Chosica we again take the train,/ the rail-road still following up the valley of/ the Rimac [Rímac], that has already narrowed to/ twenty or thirty feet in width, and is beaten/ into foam in its rapid course. The bare,/ gray mountains of granite now shut in on/ both sides nearly to the tiver, the scenery/ growing wilder as we go up./ The grade/ becomes steeper, and the engine puffs and/ pants slowly along, its wheels grinding up-/on the track, and reminding one much of/ some huge overloaded animal. Fifteen or/ twenty miles more brings [sic] us to the station of San Bartolome [sic; Bartolomé]./

The mountain sides, wherever the ingen-/uity of man could invent a way to get water/ for irrigation, are still covered with ter-/races; but we now notice a decided greenish/ cast upon the hill sides, caused by vegeta-/tion, for we have now reached a point/ where it rains, though the showers are/ slight and of short duration. The plants/ are generally small annuals that seem to be/ in haste to blossom, and bear fruit before/ the showers shall cease. There were helio-/tropes and convolvuli, and a few pretty/ ferns in the cliffs of the

rocks, with asters/ and a little marigold, while the perrenial [sic; perenial]/ plants were represented by several small/ species of cactus. But with all there was/ not enough to cover the ground with green,/ the plants appearing to be only incidental,/ while the natural state of the earth was the/ same dry, barren desert that we had but/ just passed out of from below./

San Bartolome [Bartolomé] had been for a long time/ the headquarters from which men and ma-/ terial were forwarded farther along the/ line, and the old corral, with wrecks of dead/ mules and old shanties, are the principal/ sights. The road here makes its first de-/velopment, that term signifying the doubl-/ing of the road upon itself to gain in height./ We ran back a mile or so in nearly the/ direction from which we came, and after/ winding about a while upon the mountain/ side, we locked down, and there, almost/ beneath us, and six or eight hundred feet/ below, was the station of San Bartolome [Bartolomé]./ We pass through several cuttings made in/ the solid granite of the mountain side, and/ then through a couple of small tunnels, and/we come out in sight of the famous Verru-/gas bridge. This is something more than/ two hundred feet in length, and it is said/ to be the highest bridge in the world. In/ comparison to its height the wrought iron/ columns and braces look like mere spiders'/ webs. In the bottom of the valley runs a/ small stream called "Agha [sic, Agua] de Verrugas,"/ or Verruga water, and this is the seat and/center of a curious disease, that some have/ thought was caused by drinking this water,/ called Verrugas¹¹⁹, which is Spanish

for warts./ The first symptoms of this disease are/ severe pains in the back and limbs, and/ after weeks and even months of these pains/ hard lumps are felt in the flesh of the face/ and other parts of the body, that soon come/ to the surface in large red warts. These/ seem to be more plentiful upon the face/ and neck than elsewhere, and the patient,/ though generally able to be about and often/ even at work, presents a terrible appearance/ with these great red warts, often the size/ of the thumb and even reaching that of an/ egg, over his face. These warts are almost/ or entirely without sensation, though they/ bleed at the slightest touch. After awhile/ they drop off, and the patient is considered/ well, though I have seen no one who had/ had the verrugas that had regained good/ health, and these excrescences seem to be/ rather the sign of some disorder of deeper/ root than the disease itself. The disease/ seems to have been known to the original/ inhabitants here; but upon the arrival of/ large numbers of employees of the railroad/ it broke out with great violence, attacking/ nearly every one who came, and often those/ who only remained for a few days or hours. Many think that the use of the water causes/ the disease; but some who were attacked/ had never drunk of the water, and they/ think that there may have been something/ poisonous in the soil and rock thrown out/ by the workmen. But whatever the orig-/inal cause of the diaease, the habits of the/ gangs of workmen who were gathered to-/gether here likely had something to do with/ its virulence, especially since from their/ fear of the water they used much more/ drink of the stronger kind. At the same/ time a severe form of intermittent fever/ broke out among the employees, and this/ was not confined to a distance of a few miles/ as were the verrugas, but extended all/ along the line, and received the specific/ name of Oroya fever¹²⁰. It often proves fatal/ within two or three days. Thousands of/ Chilians, who were led to come here by the/ high wages paid, now lie in the little grave/ yards along the line, and these are not all,/ for many young Americans who have come/

Already in 1764 the Spanish-born physician, chronicler, cosmographer and mathematician Cosme Bueno (Aragón, 1711 – Lima, 1798) [cf. Bueno, 1764; Herrer & Christensen, 1975; Mcpheeters, 1955] wrote that Andean peoples of Peru attributed the diseases now known as leishmaniasis and bartonellosis to the bite of the uta or sand fly (Psychodidae, Phlebotominae). Townsend (1913a-e, 1914a-d) published several papers incriminating a *Phlebotomus* as the vector of the disease, which he named *Phlebotomus verrucarum* (now *Pintomyia verrucarum*). This was definitely established by Hertig (1942), who, in the years 1937 to 1941, conducted extensive studies of the verruga valleys.

¹¹⁹ Verrugas, Oroya fever - Carrións' disease (enfermedad de Carrión - name introduced by Odriozola, 1895), caused by the bacteria Bartonella bacilliformis. Named after a medical student, Daniel Alcides Carrión, of Cerro del Pasco, Peru (See, for instace, Delgado García & Delgado Rodríguez, 1995; Delgado Matallana, 2001; García Cáceres, 2006; García Cáceres & García, 1991; León, 1987; Leonard, 1991; López Sánchez, 1957; Schultz, 1968; Short, 2003). Carrión described the disease after being inoculated on his request by Doctor Evaristo M. Chávez, a close friend and coworker in Dos de Mayo National Hospital. Carrión kept a meticulous clinical history until he was not able to do so because of the disease. Carrión proved that "Oroya fever" and "Verruga peruana" were two stages of the same disease, not two different ones as thought at the time; this was confirmed by Noguchi et al., 1928, by cultivating Bartonella bacilliformis from Oroya fever and verruga patients in the years 1926-1927. Carrión was inoculated with the pus of the purple lesion from a patient (Carmen Paredes) in 1885. He developed the disease three weeks after the inoculation and died several weeks later. Bartonella bacilliformis is considered the most deadly bartonella to date, with a death rate of up to 90% during the acute phase. Carrión's sacrifice was able to show the two phases of the disease. The causative agent of bartonellosis was discovered by the Peruvian microbiologist Alberto Leopoldo Barton in 1905, but it was not published until 1909.

¹²⁰ See previous note.

here, hoping to make a competence and/ return in a few years to enjoy it with the/ friends at home, now lie among these rug-/ged and barren mountains, while every/ train brings down a few pale, hopeless-/looking fellows on their way to the hospital/ at Lima./

From the bridge of Verrugas, a few miles/ through more cuttings and tunnels brings/ us to Surco, the present terminus of the/ road. Here were great heaps of ties and/ rails, with the various materials needed/ along the line beyond. Carpenters were/ busy putting up rude board houses and/ covering them with sheets of corrugated/ iron, and a little below there was a great/ corral with several hundred large fine mules,/ the motive power used along the rest of/ the line./

Being provided with mules and horses/ here for the trip, we intended to make/ further along the line, we set out the/ same day, and following up the road a mile/ or so, we came to the end of the track,/ where the workmen were busy putting an/ iron brige across the river. We crossed/ lower down upon one of those narrow/ bridges of wire rope that we afterward/ found so plenty along the line. They are/ put up by the Railroad Company, who/ have laid out many hundred thousand dol-/lars in these mule roads, that they might/ be able to transport the material needed in/ constructing the railroad. These bridges/ are narrow and swing at every step of the/ mule, but they are strong and serviceable./ As we followed up the river, we could see/ the terreplain winding along the mountain/ side across the river, the dirt work being/ done, and there only remaining small gangs/ of men here and there in the cutting or/ tunnels, while we could hear now and then/ the heavy booms of the blasts, and see the/ rock flying in the air and then rolling down/ the mountain side into the river./

We stopped for the night at Matucana,/ an old Indian town, now galvanized into/something like life by the railroad, and the/ bustle it has brought with it. The narrow/ muddy streets were filled with halfdrunken/ Chilenos, with here and there one of the/ natives bundled in his coarse, dark woolen/ pants and jacket, with long stockings drawn/ up to the knee, and shoes or moccasins of/ hairy raw hide. Two or three Chinese had/ established their never failing "fondas," or/ eating houses, where they were dispensing/ "chowchow" to the hungry. We had/ now reached a rainy country, as we could/ tell from the dripping eaves of the low,/ grass covered houses of mud and stone that/ formed the village, while on the hill sides,/ upon the same terrace made by their an-/cestors long, long before the coming of the/ Spaniards, the inhabitants were cultivating/ little patches of potatoes and corn, the/ rainy season being sufficient to mature these/

crops here without irrigation. I saw here/ for the first time a method of cultivating/ the soil which is likely the one used before/ the conquest, handed down, like the ter-/races cultivated by it, from generation to/ generation. The instrument in general use/ now among the Indians in cultivating their/ little patches, as well as the fields of their/ masters, is the rude wooden plow with the/ point shod with iron. This is drawn by/ oxen that are yoked by the horns; but as/ the Indians had no domestic animals larger/ than the llama, and this is too weak for/ this use, it must be concluded that the/ plow has been borrowed from the Spaniards/ who still use the same rude instrument at/ home. But here upon these narrow ter-/races where oxen cannot be used, we may/ look for the original implement of the/ Incas. This is a long wooden spade, if it/ can be called such, looking much like a/ long plow handle, having the same curved/ nib at the upper end. This runs to a long,/ narrow, flattened point at the lower end,/ which is now frequently shod with steel or/ iron. A couple of feet above the point a/ rest for the foot is made by lashing on a/ piece of wood cross-wise with thongs. The/ Indians generally work side by side with/ these implements, and with all the regular-/ity of movement of soldiers at drill, they raise their spades at the same moment, and/ making a step sideways along ther furrow,/ they place them, and springing upon them/ twice with their weight, they bear back to-/gether and loosen a sod somewhat larger/ than that raised by a common spade. A/ woman follows, turning the sods and pul-/verising them with her hands./

The next day's journey was through a/ country covered with vegetation and nearly/ all in flower. The steep hill sides were/ all in flower. The steep hill sides were/ covered with heliotropes and with a beauti-/ful geranium, much like the wild ones so/ common at home, but with much larger/ blossoms. With these there were beautiful/ tufts of little, sweet-scented verbenas, and/ wild potatoes, with large clusters of blue/ and white flowers, were abundant. A few/ low bushes were the only thing like timber/ we saw upon the trip./

A ride of ten or twelve miles brought us/ up to San Mateo, another Indian town much/ like Matucana, and here we found ourselves/ among large gangs of Chilenos and Chinese,/ who were busy on the mountain side above/ shoveling and blasting. The sound of the/ blasts toward evening was almost continu-/ous, and the pieces of rock that rolled down/ the mountain side, after crossing the road,/ made traveling exciting if not pleasant./ Just below San Mateo we visited the corral/ of the Chinese, where several hundred of/ them are kept prisoners when not

at work./ The corral was much such a pen as our/ volunteer soldiers were kept at Jackson/ during the war. The Chinese were just at/ dinner, and the immense plates of rice and/ meat served out to them put all thoughts/ of hunger out of the question. Dr. Ward,/ the surgeon of this camp, took us through/ the hospital, where a couple of dozen Chi-/nese were lying upon cots, and apparently/ receiving all the care they were capable of/ appreciating. The sheet iron roof of the/ hospital was riddled in a dozen places by/ rocks from the blast; but, fortunately,/ none of them had fallen upon the poor fel-/lows in the bunks below. As at Matucana,/ we found here several American engineers,/ surgeons, etc., generally young men who/ have been drawn here by the high salaries/ paid. Several engineers from the Univers/ity of Michigan are employed upon the/ railroad of Peru, but I have not yet en-/countered them./

Above San Mateo we soon passed the last/ gangs of laborers, the only sign of the/ railroad that is to be now being the blotches/ of white paint upon the rocks here and/ there, where tunnels and cuttings are to be/ made. A few miles further brought us to/ the narrow gorge known by the musical/ but questionable name of "Infer-/nillas," where the river rushes down be-/tween the mountains that now shit down/ to it on both sides. Here we ride along the/ river bank under sheer precipices of several/ hundred feet in height. We can see no/ place for a railroad here, but are shown/ marks on the precipices above where the/ road is to run, - now coming out of a tun-/nel and passing the river upon a bridge,/ only to plunge into a tunnel again on the/ other side, and thus for many miles. When/ finished it will likely be the wildest piece/ of railroading in the world./

Passing out of this gorge, we came into/ a country a little better fitted for building/ railroads, but still wild enough. We had/ now reached a considerable altitude, as we/ could tell by the change of climate, the/ mountains beginning to show the coarse/ puna grass and heath, while the snow-cov-/ered peaks that we had seen from far below/ now appeared bo be a few miles off,/ though the potatoe patches of the Indian/ were still seen here and there among the/ rocks. We had met several long trains of/ llamas below, loaded with the products of/ the mountains, but now we began to see/ flocks of them feeding in the cool pastures,/ with large numbers of small, coarse wooled/ sheep. Here and there along the river/ were old smelting works for reducing the/ silver ore of the mountains beyond; but/ they were nearly all in ruins, the old fur-/naces and the stone pens in which the ore/ was amalgamated with quicksilver still/ standing./

We still went on and up, passing toward/ night Indian arreiros [sic; arrieros] with little trains of/ donkeys or llamas, which they were unload-/ing, packing their loads together so as to/ make a little shelter for the night, one of/ the company meanwhile gathering the/ coarse grass for a fire with which to boil/ the little pot of potato soup for their sup-/per. We finally reached, just at night, a/ frame house up under the edge of the snow/ on the mountain side, and entering found/ ourselves among several American engi-/neers, etc., in a room well warmed, by a/ glowing stove in one corner, and we were/ soon seated at the table loaded with warm/ biscuit, ham and eggs, and all the articles/ that go to make up a genuine American/ home dinner, for the cook was an Illinoisan/ and all the camp were western men. We/ sat and talked until far into the night, with/ hardly a thought that we were fourteen/ thousand feet up in the clouds and snow/ among the Andes, and with a broad conti-/nent and ocean between us and home and/ friends./

J. B. STEERE

Letter LXVI [Peninsular Courier and Family Visitant, 12(41), October 10, 1873]

FOREIGN CORRESPONDENCE

Number LXVI

CALLAO, April 13th, 1873

The next morning after our arrival at the/ summit, we found the ground covered with/ snow that had fallen during the night, and/ a half-tamed vicuna that was tied to a stake/ near the house was busily scraping away/ the snow to find a few blades of grass. The vicuna is but a little larger than the red dear/ of the United States, but its neck is even/ longer and thinner than that of the llama. It is of a/ straw color and nearly white underneath./ Its fur or wool is of exceeding fineness, and/ if it could be procured in any quantity, it/ would become of great commercial value./ The vicuna is not now found domesticated,/ though it is said to have been in the time/ of the Incas, and the little of the wool pro-/cured is taken from skins of those killed by/ hunters. Of this are made ponchos that/ are like no other material in their softness/ and warmth./ There seems to be no reason/ why the vicunas are not domesticated, ex-/cept that the grazing farms upon the moun-/tains are without fences or enclosures, and/ the young ones captured

cannot be kept/ enclosed for two or three generations, as/ would be necessary to thoroughly overcome/ their wildness. If domesticated, they would/ not likely yield more than six or eight/ ounces of wool per year; but this should/ be of great value. Perhaps they could be/ acclimatized in the higher and cooler parts/ of the United States./

Upon counting our forces at breakfast,/ we found that most of our company were/ suffering with a curious affection common/ in these altitudes, called "soroche." This/ is something more than the oppression and/ shortness of breath so common upon high/ mountains, for it is accompanied with vio-/lent headache with nausea and vomiting./ I supposed that I was safe, as I had passed/ several mountains higher than this; but/ before we had proceeded far, I was as badly/ off as any of the rest, the sensation being/ much that of seasickness, but producing, if/ possible, a still greater feeling of helpless-/ness and hopelessness. There was no one/ of the party that would have continued the/ trip but for the ridiculousness of giving up/ to an attack of that sort. As it was, three/ of us kept on. A ride of a mile and a half/ brought us to the mouth of the summit/ tunnel, where the railroad is to pass the/ first and greatest range of the Andes. The/ mouth of the tunnel is over fifteen thou-/sand feet above the level of the sea, and/ only just below the level of perpetual snow,/ the ridges and peaks all about being thickly/ covered. Quite a village has sprang up/ around the mouth of the tunnel, the huts/ being low and made of sods, half cave and/ half above ground. In the valley, a few/ hundred feet below, a little grass is growing/ upon which llamas were feeding, and a little/ brook of snow water that we could step across, and which was formed from the/ snow drifts about us, was the Rimac [Rímac], which we had now followed up from its mouth to/ its source./

The tunnel is to be over a mile in length,/ and the workmen are now some three hun-/dred feet in on the west side, and one hun-/dred and fifty on the east. The tunnel was/ dripping with ice cold water, the product/ of the snow drifts above, and a strong/ stream runs from the mouth. The com-/pany are now arranging diamond drills, the/ machinery being nearly all in place, and/ many kegs of petroleum for running the/ engines lay about, having been transported/ on mules' backs from Surco, as also large/ quantities of timber for supporting the/ walls of the tunnel, the rock being so shat-/tered that it is unsafe without it. We here/ saw for the first time the action of a form/ of nitro glycerine, called "giant powder." / A cartridge of this, the size of a finger, was/laid upon a rock of a hard quartzite and ex-/ploded by a fuse, when it blew

the rock/ into small pieces, while one could have ex/ploded any quantity of ordinary power in/ the same way without effect. One of the/ workman afterwards fired a cartridge of the/ same, and burned it in his fingers like a/ candle, the difference seeming to be that in/ one case the explosive particles are all fired/ at once by the shock, while in the other/ they are burned more gradually. There/ were many things worthy of note at the/ tunnel; but everything seemed to be/ changed by the dull, miserable sickness we/ were suffered from into cold and ice and/ mud./

The summit tunnel is about a hundred/ miles from Lima, and to reach it the rail-/road makes eight developments, and passes/ innumerable cuttings, tunnels and bridges./ The descent upon the other side toward the/ branches of the Ucayali is much easier, and/ Oroya, the prospective terminus, is reached/ with only one development, the terreplein/ being already made to that point from the/ summit./

As we rode and crossed the pass com-/ing out on the other side, a grand panora-/ma of snow-dovered mountains glittering/ in the sun, with great elevated valleys and/ paramos covered with grass, came in sight;/ but we were in no position to enjoy beauty/ or grandeur and rode gloomly on, all of us/ wishing that we had never been tempted/ to come into the country of the "soroche." / There was no wind, and the very stillness/ that reigned in those elevated regions/ startled us as if we had gotten beyond the/ reach of noise and speech. As we descend-/ed, we passed several clear cold lakes in the/ valley, fed from the snow above, but with-/out a bush upon their banks. A few llamas/ were feeding upon the course grass; but/ the soft pads of their feet made no noise/ to break the terrible stillness that seemed/ to have settled down over the earth. Fur-/ther along the valley we saw here and there/ upon the banks of the lakes clusters of/ buildings, with the tall chimneys that/ showed them to be works for smelting the/ silver; but nearly all were quiet and de-/serted. We could now see the heaps of/ debris upon the mountain sides that had/ been thrown from the silver mines, and we/ could frequently see in the rock along the/ road veins of galena and iron pyrites, show-/ing that we were in the mineral country./

The Peruvians have a saying that though/ silver was given to mankind by the Giver/ of all good, the locating of the mines was/ left to the evil one, who put them on the/ tops of the mountains, and covered them/ with snow drifts and guarded them with/ the "sorroche," [sic; soroche] that mankind might not/ be too happy in their possession, and it/ seems to be a fact that all the Peruvian/ silver mines of any value are at these great/ altitudes./

About the middle of the afternoon we/ reached the estate of Pocura, the limit of/ our trip. The overseers of the estate had/ gone to meet us, but had taken another/ road and missed us, so that we found the/ house locked up; but we got into a sort of/ hall where there was a small stove, and/ after trying for half an hour to make a fire/ of dry sods, we gave it up and spread our/ ponchos on the floor, and tried to forget/ our troubles and headache in sleep. At/ dark the men came back and unlocked the/ doors, and prepared a great supper which/ we felt like eating, but after doing/ our bet to receive politely the many kind/ offers and sets of kindness of those men,/ we finally gor to bed, a business of more/ importance to us just then than anything/ else in the world; for that one day of sick-/ness seemed to have crushed all the enter-/prise and endurance out of us./

The next morning found us too unwell/ still to think of examining mines, if they/ had been those of Golconda; but I pre-/vailed upon an Indian hunter, by paying/ him pretty heavily, to kill me a vicuna, as/ I had heard there were many near there./ He came back after a couple of hours with/ a fine one, which he had shot from a flock/ of twenty or thirty, and I had all I wished/ to do for the rest of the day to preserve/ the skin. We tried some of the meat for/ supper, and found it not unlike venison./

The third day, though we were still far/ from well, we undertook to visit some of/ the mines belonging to the estate. We/ passed many old mines that had been long/ deserted, having fallen in or filled with/ water. The old method of mining seems/ to have been to require so much mineral of/ each Indian, and leave the management of/ the mines to them, the Indians entering/ the rock and following the veins of metal/ in holes but little larger than those of foxes./ The mines we entered were but little bet-/ter, being low and dripping with ice cold/ water. We crawled for hours up and down/ slippery ladders and through these rat/ holes, hardly ever being able to stand up/ right in them. Now and then we met an/ Indian miser crawling out, covered with/ mud and with his sack of dripping mineral/ on his back. Those miners are the most/ stupid looking set that I have yet seen, the/ dull, vacant stare with which they looked/ at us being but little less than idiotic. This/ may be accounted for by the coca that theyt/ use in such quantities, every miner having/ his sack of leaves at his side, with the little/ calabash of lime for seasoning them, while/ their distended cheeks and colored lips/ showed that they were nothing abstemious/ in its use. It very likely dulls all sense of/ pain and trouble, for unless it does I can-/not see how men could be prevailed upon/ to

work in these mines. The men work by/ reliefs, so that the work is carried on day/ and night. When the ore is brought to/ the surface, it is broken into small bits and/ then put into small sacks, and transported/ on the backs of llamas to the works; or, if/ it is of high enough grade, it is sent down/ to the coast and exported./

The most ordinary form of the ore seems/ to be in galena, lead and silver, with min-/erals of copper. The ore is reduced/ in the haciendas is first ground in a curious/ mill, - an upright shaft generally turened/ by a water wheel, dragging around at each/ revolution great stones tied by thongs to/ arms that are secured to the shaft. These/ stones, as they are dragged round, crush the small pieces of ore upon the stone bed/ below, and finally reduce them to powder,/ when it is roasted in rude ovens, that are/ heated by the dry dung of llamas, an Indian/girl sitting at the mouth of the oven, and/ throwing this in by handfuls all day long./ After the ore is thus roasted, it is put into/small stone pens carefully paved, where it/ is trated with quicksilver, and then mixed/ by turning in llamas and driving them over/ it. More modern method of reducing the/ ore are now in use in some places, but the/ fuel used is the same. The quality of the/ ore in this region seems to be rather poor,/ but it is likely to be found in any quantity,/ and perhaps when the railroad reaches/ Yauli, which is in the midst of the mines,/ they may be made of more profit./

The next morning we set out on our re-/turn, and were soon down below the level/ of Sorroche [sic; soroche], three days' trip finding us/ again at Lima safe and sound.

J. B. STEERE

Letter LXII [Peninsular Courier and Family Visitant, 12(42), October 17, 1873]

FOREIGN CORRESPONDENCE

Number LXVII

CALLAO, May 10th, 1873

Upon our return from our trip to the/ interior, as there was no immediate/ prospect of a ship for China, I spent my/ time in examining, with Dr. Hutchinson –/ the English consul – some of those curious/ mounds that are found in the large valley/ or plain in which Lima, Callao, Chorillos,/ etc., are situated. The mounds are in/ plain sight from the cars as one

goes from/ Callao to Lima and from Lima to Choril-/los, though but few who see them imagine/ their true character, they having been so/ rounded by the length of time they have/ been exposed to the weather, that at a dis-/tance no one would suppose them to be/ other than those produced by natural/ causes. They stand up bare and yellow out/ of the plain, and without the least particle/ of vegetation, as they cannot be irrigated,/ and their number and extent make them a/ real hindrance to the cultivation of the soil./ As one approaches them he finds that they/ are constructed of sun-dried bricks, or/ adobes, some mounds, like that of Pando,/ being made of small ones, six inches in/ length by four in breadth and three in/ thickness, with the finger marks still upon/ them, while others are made of large ones,/ six or eight feet in length and four in height/ and thickness, that must have been made/ in their place like those with which the/ walls about the fields are made at the pres-/ent time by the Peruvians. Upon closer/ examination one finds that these mounds/ are made up of terraces of different heights,/ and they are still surrounded in some cases/ by the remains of high strong walls of the/ same material. I measured several of the/ largest, and though rather roughly done,/ the result cannot be far from the truth./ None of them were over eighty or ninety/ feet in height, but they were from four to/ seven hundred feet in length, and from/ three to five hundred in breadth, giving sev-/eral of them a mass of twentytwo to/ twenty-five million cubic feet, second only/ to that of the great pyramids of Egypt./ There seems to be some doubt concerning/ the purpose for which they were made,/ and some of them may have been built for/ tombs; but it seems more likely that they/ were built for defense. The advantage of/ those who possessed an elevation of this/ kind must have been great when the arms/ used were spears and stones. This great/valley, easily irrigated from the Rimac [Rímac],/ must have been thickly populated, and/ those mounds were likely built by its in-/habitants for refuge and defense in time of/ war. They have apparently been made at/ different times and by different possessors,/ as their material differs, and in many cases/ they had lost their original use before the/ conquest, as some of them are buried by/ hundreds of tons of stones that have been/ picked from the plains about to clear them/ for cultivation. This work must have been/ done before the conquest, as it hardly seems/ probable that those of Spanish descent/ would have taken the trouble to pick such/ vast quantities of stone, judging from those/ at present here. Some of the mounds have/ also been used as burial places by people/ more modern than their makers, and we/

found one that was perfectly full of human/ remains, that had been put in without or-/der all over the top. They had buried with/ them slings and coarse pottery, and the/ skulls were not flattened like the most of/ those found along the coast./

After we had visited the most of the/ mounds and ruins near Lima, Dr. Hutch-/inson formed a party to go to visit the ruins/ of the Temple of the Sun at Pachacamac [Pachacámac],/ some thirty miles down the coast to the/ south. We took the train early in the/ morning at Lima for Chorillos, the New-/port of Lima, and situated upon the coast/ nine or ten miles to the south. Chorillos/ is a town of perhaps twenty thousand in-/habitants in its own right; but during the/ summer nearly all Lima, or at least the/ moneyed part of it, come here where they/ have nice houses, and pass the season/ much as it is passed in other bathing places./ We found horses waiting for us here, and/ we set out down the coast, passing one/ estate and then coming into the bare des-/ert, that comes down to the sea in that/ direction, the only break being a great salt/ marsh in one place filled with rushes. We/ were much interested in watching the curi-/ous effects produced by mirage along the/ coast, the whole plain in front of us appear-/ing to be a sea that retired as we advanced./ The road is not considered safe from rob-/bery, as as we were waiting for some of/ the party who were behind to come up,/ and were looking back along the route we/ had come, the first we saw of them, they/ appeared to be mounted on horses twenty/ feet in height that were walking in the air,/ but as they approached they gradually re-/ summed their proper proportions, and came/ down to the earth again. After a ride of/ three or four hours, we came to a valley/ showing some signs of cultivation, with/ several small rocky islands lying in the sea/ opposite, and we were told that this was/ the valley of Pachacamac [Pachacámac]. On the other/ side of the valley there was a hill of three/ or four hundred feet in height, and upon/ this we could see the ruins of the great/ temple, while behind the hill, extending/ back for a mile or more, were the ruins of/ the ancient town. The temple was built of/ stone and adobe mixed, the hill upon/ which it is placed being apparently composed of a shattered rock that was gener-/ally broken into blocks eight or ten inches/ square, and the adobes were made of the/ same size, so that they could be laid up/ together. They were laid up in soft mud,/ and then the walls were covered with a/ coat of red plaster or paint, the coloring/ matter of which appears to have been red/ ochre, and this is still adhering to the walls/ where they are least exposed to the weather./ The temple fronts to the sea, and in the/

wall near the center of the front are a num-/ber of what appears to be pillars at a dis-/tance, but they are in reality projections/ from the wall itself. Surrounding the/ temple on all sides is a terrace, the hill/ sides in some places having been excavated/ to make it, and in others walls having been/ built to support it. The extent of this ter-/race, including the temple, is almost ten/ acres, and the temple proper occupies four/ or five. We could get but little idea of its/ construction from the mass of ruins in/ which it is at present; but it did not likely/ bear any proportion in height to modern/buildings, being probably a great wall/twenty or thirty feet in height, nearly equal/ in length on every side, and enclosing a/ space that was divided up into many small/ rooms and divisions, for the various uses to/ which it was designated. We found in/ some places pieces of very fine and beauty-/fully painted pottery, much finer than we/ afterwards dug up; but the probability of/ finding anything by digging in the ruins/ seemed small./

Between the hill and temple and the/ ruins of the town behind them, was a val-/ley which was covered with bones and/ skulls and curious baskets or sacks of/ rushes, in which the bodies had been/ buried, that had been dug out in the search/ after treasure, and here we concluded to/ spend some time in digging. We procured/ several Chinese from a neighboring hacien-/da, and began work where there seemed to/ be the greatest promise of graves still un-/disturbed. We found no lack of bodies,/ the greatest trouble being with the sand/ that was so dry and fine that it covered us,/ filled our mouths and throats, and covered/ upon everything as fast as we could dig it out./ The ground seemed to be perfectly full of/bodies, - at first a layer a foot or so beneath/ the surface, buried without much care and/ wrapped in coarse cotton cloths, while be-/low there were vaults in which the dead/ had been buried with more care. The sand/ generally ran into them and covered every-/thing, so that we could get but little idea/ of the method of burial; but with the great-/est pains we uncovered one, and found it/ as follows: At first there was a fine mat/ woven of rushes; this covered a layer of/ small canes that were laid thickly over the/ mouth of the vault below. Carefully re-/moving these, we looked down into a vault/ four or five feet in depth and as many in/ breadth. In one end of this stood two of/ the before mentioned sacks or baskets of/ rushes, each with a human skeleton, the/ baskets being kept upright by sticks, the/ bodies having being buried in the sacks in/ the usual sitting posture, with the knees/ drawn up to the breast. In the top of one/ of the sacks was sticking something that/ looked like a human head, wrapped

in a/ cotton cloth. Unwrapping this, we found/ it to be rude human face cut out of wood,/ with sea shells for eyes, and an old fishing/ net fastened on behind like a chignon, to/ give it the shape of the head, while it was/ covered with hair made from the fibre of/ some plant or the bark of a tree. This/ curious figure thus perched on the top of/ the sack containing the body was the high-/est object in the vault, overlooking the rest,/ and likely the family god buried with its/ owners. We found several of these wooden/ faces laying around among the skeletons/ and other remains that had been dug out,/ and they seem to have been buried in most/ or all of the vaults. The bodies found here/ had very little cloth buried with them, dif-/fering in this, as well as in many other/ respects, from those found at Chosica,/ Ancon [Ancón], etc.; but we found several curious/ aprons, much like those I found in use/ among the Indians in the interior of Brazil,/ though larger, these being six or eight/ inches square, and with a fringe along the/ lower edge. These were likely the princi-/pal or only clothing of the ancient inhabit-/ants of Pachacamac [Pachacámac]. In front and at the/ feet of the two bodies we found in the/ vault, were a number of pots of different/ sizes of coarse earthen-ware, and these were/ all carefully covered with the plates or/ dishes made of the shell of a very hard/ gourd, that is still in use in Peru for the/ same purpose among the Indians. Taking/ out these pots and opening them, we found/ them to contain different kinds of provis-/ions, one or two having a curious black/ corn in the ear, another beans, another pea/ nuts, and another the dry roots of the yucca,/ while a large flat calabash held the skel-/eton and hair of a couple of small animals/ that seemed to be Guinea pigs. Beneath/ these were several larger jars, in which/ there was a sediment that was without/ doubt the remains of chicha. There were/ fishing nets with the bodies, and in one/ place we found a small paddle of a curious/ shape, and this people, like those of Ancon [Ancón],/ must have subsisted in great part upon fish./

A ride of a couple of miles from the ruins/ brought us to a fine stream crossed by an/ iron bridge, and crossing this we entered/ the beautiful valley of Lurin [Lurín], passing along/ a road shaded by large willows, with fields/ of sugar cane on each side. After visiting/ the little mud town of Lurin [Lurín], we rode back to a hacienda where we passed the night./ As we were taking our supper upon the/ veranda, the Chinese of the hacienda, sev-/eral hundred in number, came up from/ their work, and among them thirty or forty/ chained together two and two holding up/ their chains with one hand to keep them/ from

galling their legs, and with the other/ carrying their spades, their ordinary imple-/ment. These had been refractory or rebel-/ious, and this was their punishment. We/ could hear the clanking of their chains long/ after we had gone to bed, as they moved/ about their quarters, washing themselves/ and cooking their supper, and were waked/ by the same sound in the morning as they/ moved off to the field. The lot of the/ Chinese in Peru is likely full as bad as was/ that of the slaves in the Southern States; at least for their eight years of service./ They are flogged by brutal overseers, put/ in irons, badly fed and clothed, and gener-/ally look poor and sickly, though those em-/ployed on the railrods being constructed/ by Mr. Meiggs are an exception, as they/ appear to be well fed and satisfied. Sick-/ness is very prevalent among them, and/ suicide is common, and this often by hang-/ing, the little trees about the building of/ the hacienda often bearing fruit of this/kind. Much less than half of the Chinese/ likely live to serve out their time, and every/ hacienda has a spot in some barren deserted/ place where the little mounds are thick,/ each one covering a poor Chinaman buried/ without coffin or shroud, and with no sign/ to tell his name or to show that the living/ care for him, except, perhaps, a few pieces/ of rice paper containing prayers, likely, in/ Chinese characters, and held down by little/ stones to keep them from blowing away./ The treatment of the Chinese in Peru is/ only another proof that mankind are not civilized enough yet so that individuals can/ be allowed the right of property in their/ fellow men without abusing it.

J. B. STEERE

RESUMO

Joseph Beal Steere (1842-1940) foi enviado pela Universidade de Michigan numa viagem ao redor do mundo, de 1870 (setembro) até 1875, para coletar espécimes em todas as áreas das ciências naturais e humanas para o Museu da Universidade. De Nova Iorque embarcou para o Brasil (São Luís, Maranhão), subindo depois o rio Amazonas e permaneceu 18 meses nesse rio e alguns de seus afluentes. Chegado ao término da navegação do Amazonas, na boca do rio Santiago (Peru), desceu numa balsa, por duzentas milhas, para chegar à boca do Huallaga. Subiu este rio até Yurimaguas, de onde atravessou os Andes. Parte da viagem foi feita a pé ou a cavalo, e no caminho passou algum tempo nas antigas cidades de Moyobamba, Chachapoyas e Cajamarca. Atingiu a costa em uma cidade chamada Huanchaco, perto da cidade de Trujillo, e daí foi para Lima, depois

para Guayaquil, e, por terra, a Quito, sempre coletando. Em Quito subiu o vulção Pichincha e foi até o fundo de sua cratera. De volta a Quito e Lima fez uma excursão pela costa do Peru, coletando antiga cerâmica peruana em túmulos etc. De Lima foi à região mineira de Cerro de Pasco, para coletar minerais. Finalmente, partiu da capital peruana e cruzou o Pacífico num navio que se dirigia a Macau, na China. De Macau viajou sucessivamente a Hong Kong e Cantão, de Cantão à ilha de Formosa, onde permaneceu de seis a oito meses fazendo viagens entre os selvagens do interior. De Formosa, via Hong Kong e Cantão, foi para as Filipinas, onde passou dez meses, visitando muitos lugares nunca antes visitados por naturalistas e encontrou quarenta espécies novas de aves. Das Filipinas foi a Cingapura, daí para Malaca, e viajou pelas Molucas Holandesas, parando em lugares como Java, Macassar, Amboina e Ternate. Dessas ilhas regressou a Cingapura e dali, via o Canal de Suez e o Mediterrâneo, foi a Marselha, com uma escala em Nápoles. Cruzando a França por trem, chegou a Londres e de Liverpool voltou para os Estados Unidos, depois de uma ausência de pouco mais de três anos. Periodicamente escrevia cartas narrando suas aventuras e impressões, com notas sobre as regiões visitadas, ao Peninsular Courier and Family Visitant, uma revista semanal editada em Ann Arbor, onde eram publicadas. As 62 cartas escritas por Steere na América do Sul (Brasil, Peru e Equador) são transcritas abaixo, com comentários.

Palavras-Chave: Joseph Beal Steere; Viagens; Amazônia brasileira; Peru; Equador; Cartas.

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APPENDIX I

List of the fishes collected by Steere in the Amazon River in 1901 (Eigenmann & Bean, 1907)

Ageneiosus ucayalensis Castelnau, 1855, Sluriformes, fam. Ageneiosidae

Anableps tetrophthalmus Bloch, 1794 – Cyprinodontiformes, fam. Anablepidae

Ancistrus doliochopterus Kner, 1854 – Siluriformes, fam. Loricariidae

Astyanax bimaculatus (Linnaeus, 1758) – Characiformes, fam. Characidae

Brachyplatystyoma goeldii Steindachner & Bean, 1907 [Fig. 2] – Siluriformes, fam. Pimelodidae

Brachyplatystyoma rousseauxii (Castelnau, 1855) – Siluriformes, fam. Pimelodidae

Callophysus macropterus (Lichtenstein, 1819) – Siluriformes, fam. Pimelodidae Chalcinus elongatus Günther, 1864 – now *Triportheus* elongatus (Günther, 1864), Characiformes, fam. Characidae

Curimatus knerii Steindachner, 1876 – now Curimata knerii (Steindachner, 1976), Characiformes, fam. Curimatidae

Doras dorsalis Valenciennes in Cuvier & Valenciennes, 1840 – Siluriformes, fam. Doradidae

Eigenmannia troscheli (Kaup, 1856) – now Rhabdolichops troscheli (Kaup, 1856), Gymnotiformes, fam. Sternopygidae

Elopomorphus elongatus (Spix & Agassiz, 1829) – now Anodus elongatus Spix & Agassiz, 1829, Characiformes, fam. Hemiodontidae

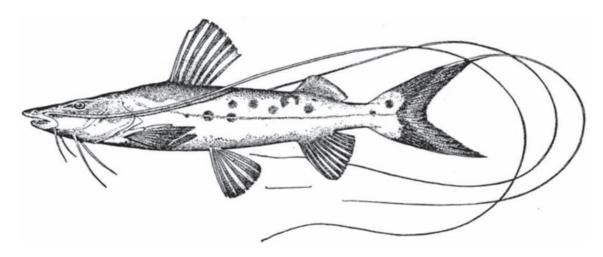


FIGURE 1: Brachyplatystoma goeldii (Eigenmann & Bean, 1907: 661).

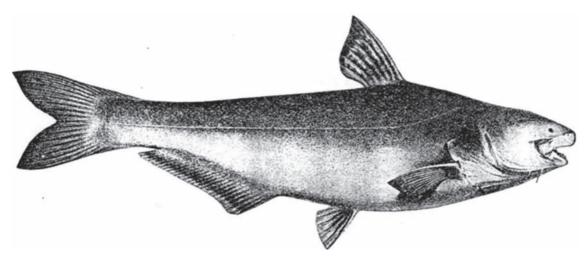


FIGURE 2: Paracetopsis occidentalis (Eigenmann & Bean, 1907: 661).

Engraulis atherinoides (Linnaeus, 1766) – now Pterengraulis atherinoides (Linnaeus, 1766), Clupeiformes, fam. Engraulidae

Gymnotus carapo Linnaeus, 1758 – Gymnotiformes, fam. Gymnotidae

Hemiancistrus vittatus (Steindachner, 1881) – now Peckoltia vittata (Steindachner, 1881), Siluriformes, fam. Loricariidae

Hemicetopsis candiru (Spix & Agassiz, 1829) – Siluriformes, fam. Cetopsidae

Hemiodus immaculatus Kner, 1858 – Characiformes, fam. Hemiodontidae

Hoplerythrinus unitaeniatus (Spix & Agassiz, 1829) – Characiformes, fam. Erythrinidae

Hoplosternum thoracatum (Valenciennes in Cuvier & Valenciennes, 1840) – now Megalechis thoracata (Valenciennes in Cuvier & Valenciennes, 1840), Siluriformes, fam. Callichthyidae

Hypophthalmus edentatus Spix & Agassiz, 1829 – Siluriformes, fam. Hypophthalmidae

Hypopomus artedi (Kaup, 1856) – Gymnotiformes, fam. Hypopomidae

Loricaria cataphracta Linnaeus, 1758 – Siluriformes, fam. Loricariidae

Luciopimelodus agassizii (Steindachner, 1876) – now Pinirampus prinampu (Spix & Agassiz, 1829), Siluriformes, fam. Pimelodidae

Macrodon trahira (Spix in Spix & Agassiz, 1829) – now Erythrinus macrodon Spix & Agassiz, 1829, Characiformes, fam. Erythrinidae

Mylossoma albiscopum (Cope, 1972) – now Mylossoma duriventre (Cuvier, 1817), Characiformes, fam. Characidae

Osteoglossum bicirrhosum Spix & Agassiz, 1829 – now Osteoglossum bicirrhosum (Cuvier, 1829), Osteoglossiformes, fam. Osteoglossidae

Pimelodella cristata (Müller & Troschel, 1848) – Siluriformes, fam. Pimelodidae

Pimelodus altipinnis Steindachner, 1866 – Siluriformes, fam. Pimelodidae

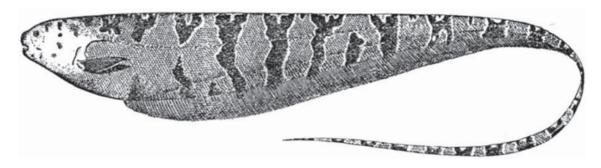


FIGURE 3: Steatogenys elegans (Eigenmann & Bean, 1907: 666).

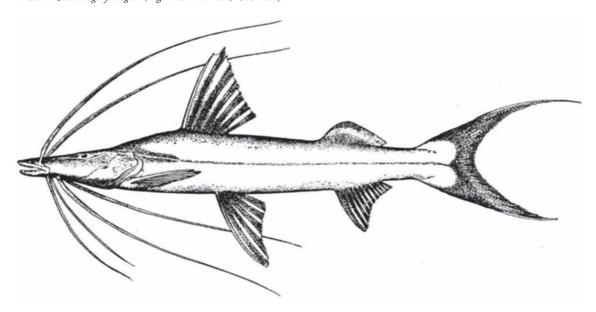


FIGURA 4: Taenionema steerei (Eigenmann & Bean, 1907: 662).

- Pinirampus pirinampu (Spix & Agassiz, 1829) Siluriformes, fam. Pimelodidae
- Platystomatichthys sturio (Kner, 1858) Siluriformes, fam. Pimelodidae
- Plecostomus plecostomus (Linnaeus, 1758) now Hypostomus plecostomus (Linnaeus, 1758), Siluriformes, fam. Loricariidae
- Potamotrygon humboltii (Roulin) -?
- *Prochilodus taeniurus* Valenciennes –?
- Pseudacanthicus spinosus (Castelnau, 1855) Siluriformes, fam. Loricariidae
- Pseudauchenipterus nodosus (Bloch, 1794) Siluriformes, fam. Auchenipteridae
- Pterygoplichthys multiradiatus (Hancock, 1828) now Liposarcus multiradiatus (Hancock, 1828), Siluriformes, fam. Loricariidae
- Pygopristis serrulatus Cuvier & Valenciennes, 1850 now Serrasalmus serrulatus (Cuvier & Valenciennes, 1850), Characiformes, fam. Characidae
- Rhamdia quelen (Quoy & Gaimard, 1824) Siluriformes, fam. Pimelodidae

- Rhamphichthys marmoratus Castelnau, 1855 Gymnotiformes, fam. Rhamphichthyidae
- Rhamphichthys reinhardti Kaup, 1856 Gymnotiformes, fam. Rhamphichthyidae
- Rhaphiodon vulpinus Spix & Agassiz, 1829 Characiformes, fam. Cynodontidae
- Selenaspis herzbergii (Bloch, 1794) now Arius herzbergii (Bloch, 1794), Siluriformes, fam. Ariidae
- Steatogenys elegans (Steindachner, 1880) [Fig. 4] now Brachypopomus elegans (Steindachner, 1880), Gymnotiformes, fam. Hypopomidae
- Sternarchella schotti (Steindachner, 1868) Gymnotiformes, fam. Apteronotidae
- Sternarchorhynchus mormyrus (Steindachner, 1868)

 Gymnotiformes, fam. Apteronotidae
- Taenionema steerei Steindachner & Bean, 1907 [Fig. 5]
 now Goslinea platynema (Boulenger, 1888), Siluriformes, fam. Pimelodidae
- Trachycorystes galeatus (Linnaeus) now Trachelyopterus galeatus (Linnaeus, 1766), Siluriformes, fam. Auchenipteridae

APPENDIX II

P. L. Sclater & O. Salvin, 1878. On the collection of birds made by Prof. Steere in South America. Proc. zool. Soc. London 1878: 135-142

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"At the request of Prof. J. B. Steere, of the University of Michi-/gan, U. S. A., we have had great pleasure in examining the collection/ of birds which he made during his recent transit across South Ame-/rica, from Para to Callao, and in determining and naming the speci-/mens.//

In Oct. 1870, Prof. Steere went from Para first to Vigia, on the/ south bank of the Amazons, near the mouth, about fifty miles below/ Para. Returning to Para he next visited Arare [Arari], on the south side/ of the island of Marajo [Marajó]. On finally leaving Para to the interior,/ in June 1871, he ascended the river to Santarem [Santarém], and from Santarem/ visited Obidos on the north bank. From Santarem he continued/ upwards to Manaos, or Barra, as it was formerly called, and thence/ made an excursion up the Purus river to Ituchy and Marrahan./ Leaving Manaos in Oct. 1871, he ascended the main stream to/ Pebas, in Peru, where several skins, having the well-known "make" of/ Mr. Hauxwell (amongst which is a skin of Porzana hauxwelli, nobis),/ were procured. From Pebas Prof. Steere continuted the ascent of/ the river to Barrancas and Pongo Manseriche, at the foot of the/ Andes, but returned downwards to the mouth of the Huallaga, and/ then ascended that stream to Yurimaguas, where he arrived in/ March 1872.//

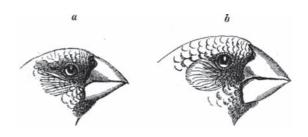
Here the voyage by steam came to an end, and Prof. Steere pro-/ceeded across country, via Tarapota, Moyobamba, Rioja, Chacha-/poyas, and Caxamarca, to the Pacific coast at Truxillo. From/ Truxillo Prof. Steere kept along the coast, viâ Pacasmayo t/ Sorritos¹ and Tumbez, where, as will be seen by our notes, many/ of the local and interesting species of Western Peru were met with./ From Tumbez Prof. Steere went to Guayaquil, and thence up to/ Quito and back. Next he proceeded to Lima by Callao, and made/ an excursion from the Peruviam capital up the Rimac and over the/ Andes, to the vicinity of Cerro de Pasco, retrurning finally to Callao./ From Callao Prof. Steere sailed, in May 1873, for China and the/ Philippines, where he made those great discoveries in ornithology which have already rendered his name well known to ornitholo-/gists2.//

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During his journey across South America Prof. Steere made a/ collection of 911 skins of birds, belonging to about 362 species of/ the following groups:

	ex.	sp.		
1. Passeres	503	145		
2. Cypseli	108	52		
3. Pici	23	17		
4. Coccyges	93	45		
5. Psittaci	35	16		
6. Striges	14	5		
7. Accipitres	23	16		
8.Steganopodes	3	3		
9. Herodiones	13	9		
10. Anseres	5	4		
11. Columbae	27	14		
12. Gallinae	7	5		
13. Grues	4	4		
14. Limnicolae	41	18		
15. Gaviae	7	5		
16. Crypturi	5	4		

As might have been expected from the fact of Prof. Steere not/ having made a lengthened stay at any of the localities visited, the/ greater number of the specimens which he collected belong to/ well-known species, which we have named according to our "No/menclator Avium Neotropicalium". But there are examples of/ twenty-two species amongst them, either unknown to us or other-/wise of interest, concerning which we have the following notes to/ offer.//



a. Head of Oryzoborus crassirostris. b. Head of O. atrirostris.

Sorritos I do not find marked in the maps; but Professor Steere tells us it/ is on the coast, about 20 miles south of Tumbez.//

² See Mr. Sharpes's memoir in Trans. Linn. Soc. n. s. Zool. Vol. I p. 307 et l seqq. (1877).//

1. ORYZOBORUS ATRIROSTRIS, sp. n.

Ater aeneo-nitens unicolor; remigibus primariis ad basin albis, speculum parvum tectricibus absconditum effiucientibus; rostrol crasso, nigro; cauda paulum rotundata: long. tota 6.0, alae 2.9, cauda 2.7, tarsi 0.75.

Hab. Moyobamba, Peru (Steere).//

Obs. Ab *O. crassirostris* et affinibus rostro robustiore et nigro/ diversus.//

This *Oryzoborus*, of which Prof. Steere only obtained a single/ example, now in the Museum of the University of Michigan, is/ quite new to us³. It is readily distinguished from *O. crassiros-*//

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tris and its representative forms (O. maximilianii, O. occidentalis, | and O. melas) by its black bill, which, as will be seen by the outline given, is also more robust than in O. crassirostris. | |

There is a small white speculum, which does not extend unto the/ outer web of the three other primaries, and is concealed by the/ great coverts when in their natural position. On the under sur-/face of the wing the white extends barely half an inch beyonf the black under wing-coverts, and then passes into grey, and at the/ extremities of the feathers into black.//

2. PIEZORHINA CINEREA, Lafr.

Guiraca cendre, Prév. et Des Murs, Voy. 'Venus', Ois. P. 209.

Guiraca cinerea, Lafr. Mag. de Zool. 1843, pl. 20 (subg./ Piezorhina).

Camarhynchus cinereus, Gray and Mitch. Gen. B. ii. P. 369;/ Bp. Consp. I. p. 542; Salvin, Trans. Zool. Soc. Ix.p. 491; Tacz./ P. Z. S. 1877, p. 321.

MM. Jelski and Sztolzmann first discovered the truu habitat of/ this curious finch, which, through an error of the Naturalists of the/ Voyage of the 'Venus', had been assigned to the Galapagos.//

Prof. Steere's series contains a single skin obtained in Dec. 1872, at Sorritos, in Western Peru. It is marked "male; eyes light/ hazel." It agrees in every respect with an example from Tumbez/ (Jelski) in Sclater's collection.//

3. HAEMOPHILA STOLZMANNI, Tacz.

Haemophila stolczmanni, Tacz. P. Z. S. 1877, p. 322, pl. xxxvi./ fig. 2.

Of this recently described Finch, of the same district, Prof./ Steere likewise obtained a single example at Sorritos. In Dec. 1872./ It is marked "male; eyes hazel." The discovery of a typical/ *Haemophila* (of which the six previously known species are entirely/confined to Central America) in Western Peru is a fact of the highest interest.//

4. GNATHOSPIZA RAIMONDII, Tacz.

Gnathospiza raimondii, Tacz. P. Z. S. 1877, pl. 320, pl. xxxvi,/ fig. 1.

Of this peculiar Fringilline form Prof. Steere obtainede four exem-/ples during his sojourn at Sorritos.//

5. ICTERUS GRACE-ANNAE, Cassin.

Icterus grace-annae, Tacz. P. Z. S. 1877, p. 323.

Prof. Steere's series contains two skins of this well-marked *Icterus*,/ described in 1867 by the late Mr. Cassin, from a single specimen in/ the museum of the Academy of Philadelphia, of which the exact/ locality was uncertain. The western sea-board of Ecuador and Peru,/ however, is its undoubtful habitat, as the late Prof. James Orton//

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obtained specimens at Machala, near Guayaquil, as recorded by/ Salvin (Ibis, 1874, p. 323). Jelski and Stolzmann also found it at/ Tumbez, as recorded by Taczanowski, *l. s. c.;* and Prof. Steere col-/lected two examples — one at Pacasmayo on the cost north of/ Truxillo, and the other at Trumbez.//

6. CYANOCORAX MYSTACALIS.

Pica mystacalis, Geoffr. Mag. de Zool. 1835, pl. 34.

Cyanocorax mystacalis, Scl. et Salv. Nomencl. P. 39, et P. Z. S./ 1876, p. 272; Tacz. P. Z. S. 1877, p. 323.

Cyanocorax ortoni, Lawr. Ann. Lyc. N. Y. p. 166.

³ Sporophila othello, Bp. Consp. I p. 498, ex Am. Centr. (Mus. Berol.) is/ unknown to us and indeterminable, unless type is existent.//

Of this fine species Prof. Steere obtained one example at Tumbez,/ where NN. Jelski and Stolzmann also procured it. Having now,/ through Mr. Lawrence's courtesy, had the opportunity of examining/ the type of his C. ortoni, we are able to state that our anticipation/ as to its identity with C. mystacalis was quite correct. Prof. Orton's/ skin is labeled as having been obtained at "Zicapa, Peru, Oct. 22,/ 1874." It may be remarked, that, whereas in Prof. Steere's/ specimen the five outer pairs of rectrices are wholly white, in Prof./ Ortin's the pair next to the middle pair have the basal half blue/ and indications of like colour in the centers of the adjoining pairs./ It is probably on some such specimen as this that C. bellus of/ Schlegel4 was established.//

7. EUSCARTHMUS ZOSTEROPS?

A skin of a Tyrant, obtained by Prof. Steere at Moyobamba, so/ nearly agrees with E. zosterops, Pelzeln, Orn. Bras., p. 173, that we/ are unwilling to separate it on the faith of a single specimen. But/ it is certainly larger in its dimensions⁵, has a rather shorter bill,/ and the edgings of the wing-coverts and secondaries are paler ans/ more distinct.//

8. ORCHILUS ECAUDATUS Lafr. et d'Orb.).

A skin of this species from Rioja, Peru, seems to agree well with/ Sclater's example from San Esteban (P. Z. S. 1868, p. 631). D'Orbigny's original type was from Yuracares, Bolivia.//

9. MYIARCHUS SEMIRUFUS, sp. nov. (Plate XI.)

Suprà fuscescenti-cinereus; uropygio et alarum caudsaeque mar-Iginibus castaneis, remigum omnium et rectricum mediarum partel medià nigricante; subtùs ochraceo-rufus unicolor; rostro et/ pedibus nigris: long. Tota. 7.5, alae 3.4, caudae 3.4, tarsi 1.0.

Hab. Pacasmayo, Peru (Steere).

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Although so abnormal in colour, we cannot arrange this bird, of/ which Prof. Steere unfortunately

Cf. Scl. et Salv. P. Z. S. 1876, p. 272.

5		Long. tota,	alae,	caudae.
	Ex. ex Borba (Natt.)	4.0	2.0	1.7
	Moyobamba (Steere)	5.0	2.2	2.1

obtained but a single specimen, as/ otherwise than a typical Myiarchus. The wings are rather short,/ the third, fourth, and fifth primaries being nearly equal and longest./ The wing-end, embracing the first five or six primaries, is black, as/ are the centre portions of the other remiges; but the latter are bor-/dered above and below with rufous. In the tail the black colour is/ confined to the inner webs of the three middle pairs of rectrices, the/ two outer pairs being wholly rufous, and the next pair only a/ slight trace of the black patch.//

10. MACHAEROPTERUS PYROCEPHALUS. Sclater.

Machaeropterus pyrocephalus, Sclater, Ibis, 1862, p. 176.

Of this beautiful Manikin two examples were procured by Prof./ Steere - one at Rioja, and the other at Moyobamba.//

11. ATTILA TORRIDUS, Sclater.

Attila torridus, Sclater, P. Z. S. 1860, p. 280.

A single skin from Santa Rosa agrees with Sclater's types of his/ A. torridus, except in being rather brighter bellow and in being/ rather shorter in the wing. We do not think it distinguishable.//

12. FURNARIUS PILEATUS, sp. n.

Suprà castaneus, superciliis albis; pileo obscure brunneo; subtùs/ albus, lateraliter ochraceo perfusus; remigibus nigris rufol bifasciatis; rectricibus castaneis, maculà in pogonio interiorel nigrà praeditis; rostro corneo, mandibulà inferiore ad basin/ albicante; pedibus nigris; long. Tota 6.8, alae 3.5, caudae 2.4, tarsi 1.1.//

Hab. Santarem, Amazons (Steere).

Obs. F. figulo affinis, sed pileo brunneo et pedibus majoribus/ diversus.

A single skin of a Furnarius obtained at Santarem, on the south/ bank of the Amazons, seems tro be referable to a representative/ form of F. figulus, of S. E. Brazil, distinguishable by its dark bwon/ cap. In F. figulus the head is of exactly the same colour as the/back.//

13. THAMNOPHILUS SIMPLEX, Sclater.

Thamnophilus simplex, Sclater, Ibis, 1873, p. 387.

A single skin obtained at Vigia exactly agrees with Sclater's type/ of this little-known species, now in his collection. It is marked/ "male: eyes red."

14. STHEATORNIS CARIPENSIS.

A skin of this bird in Prof. Steere's collection is labelled as having/ being obtained at Caxamarca, in the Peruvian Andes. This, so far as/ we know, is much farther south than any previously recorded locality//

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for this wonderful bird. Since we examined this skin, Mr. C. Buckley/ has sent an example of *Steatornis* from Sarayacu on the Rio Bobo-/naza, a confluent of the Pastaza, in Ecuador, thus connecting Prof./ Steere's Peruvian locality with those hitrherto known for *Steatornis*/ in Columbia and Venezuela.//

15. PICUMNUS SCLATERI, Tacz. P. Z. S. 1877, p. 327.

We are inclined to refer a skin of a *Picumnus*, obtained at Tumbez/ in December 1872, to this recently described species, although in/ this difficult group an actual comparison of specimens is necessary to/ establish identity./

Prof. Steere's specimen is marked "male," but agrees with a bird/ described as a female by M. Taczanowski, in having the head spotted/ with white. If, therefore, the sexes are rightly determined in both/ cases, it would seem that this species differs from most of its con-/geners in not having the head spotted with red or yellow in the male sex./

16. CHLORONERPES SEDULUS.

Campias sedulkus, Cab. et Hein. Mus. Hein. Iv. p. 153.

Chloronerpes sedulus, Scl. et Salv. Nomencl. p. 99.

A "male" of this little known species was obtained by Prof./ Steere at Obidos, on the Amazons. Sclater's collection contains a/ single female from Guiana; and the type described by Cabanis and/ He-

ine was of the same sex. The male, which is hitherto undescribed, differs from the female in having the feathers of the cap terminated/ with red instead of yellow./

The species is easily recognizable by the large well-defined pale/ yellow spots on the wing-coverts. Prof. Steere notes the eyes as/ "blood-red".

17. COLAPTES RUPICOLA (Lafr. et D'Orb.).

Colaptes rupicola, Scl. et Salv. Nomencl. p. 101.

A "female" skin from Cajamarca, which we refer to this species,/ differs slightly from skins obtained in Southern Peru by Mr. Whitely/ (see P. Z. S. 1869, p. 154) in having the spots on the chest produced/ laterally into narrow transverse bands. The rump and lower surface/ are likewise rather deeper in colour./

The label states that the bird is found "in the Upper Andes, among/ the rocks; nests in mud walls; eyes sulphur yellow."/

18. CAPITO STEERII, sp. nov. (Plate XII.)

Suprà laetè viridis, píleo vividè coccíneo, nuchâ caeruleâ; subtùs! pallidè limonaceo-flavus, plaga gulari et altera subpectorali! coccineis; ventre viridi flavoque variegato; rostro plumbe-l'scente, tomiis et ápice flavis; pedibus obscurè plumbeis: long.! tota 5.8, alae 2.8, caudae 1.8, tarsi 0.8.

Hab. Moyobamba, Peru (Steere).

Obs. Affinis *C. richardsoni*, sed colore corporis superioris palli-/diore viridi, nuchâ cyaneâ, et pectore limonaceo-flavo sanè diversus./

Of this beautiful new *Capito*. Which we have the pleasure of dedi-/ting to its discoverer, there is, unfortunately, but one specimen in the collection, now in the Museum of the University of Michigan. The/ species is closely allied in form and disposition of colour to *C./ richrdsoini*, but may be distinguished by the differences pointed out/ above.

Among some birds lately sent by Mr. G. N. Lawrence of New/ York to Sclater for determination, we find an imperfect skin, evi-/dently of the same species. It was obtained by Walter S. Church/ at the "headwaters of the Huallaga," during his journey up that/river, and belongs to the collection of the Smithsonian Institution./

19. COLUMBULA CAMPESTRIS (Spix).

Five specimens of this species are in Prof. Steere's collection, all/ of them obtained at Arare, in the island of Marajo. The species,/ though long ago described by Spix, has seldom been met with by/ more recent collectors. Natterer, however, secured several examples,/ mostly in the Brazilian provinces of Goiaz and Cuyaba./

20. LIMOSA FEDOA (Linn.).

Limosa fedoa, Scl. & Salv. Nomencl. p. 146.

One of two specimens of this Godwit was obtained at Santa Rosa,/ Ecuador; the other is without precise locality. Though the allied/ *L. hudsonica* ranges throughout South America, this species, so far/ as we know, has not hitherto been noticed south of Central America./

21. XEMA SABINII, J. Sab.

Xema sabinii, Coues, Birds of the North-west, p. 660.

Prof. Steere's collection contains a single example of the Fork-/tailed Gull, shot at Tumbez, Western Peru. This is the first instance/ of the occurrence of the species in any thing like so southern a locality,/ the limit of its southern range having hitherto supposed to be/ the Great Salt Lake, Utah. The specimen is in adult winter plumage,/ the head being white, the nape and back of the neck ashy black,/ each feather with a very narrow white margin; the mantle is pure/ grey, and the primaries coloured as in the adult bird.

22. CRYPTURUS TRANSFASCIATUS, sp. n. (Plate XIII.)

Suprà ochraceus, dorso toto et alis extùs nigro transfasciatis;/ cérvice postiça murino-brunneâ; píleo Nigro, ochraceo brunneo/ transfasciato; superciliis, gula et abdomine médio albis; cérvice/ imâ et pectoire griseis; hypochondriis et tectricibus caudae infe-/rioribus cervinis nigro transfasciatis; rostro corneo, mandibulae/ basi flavicante, pedibus flavis: long. tota 12, alae 6.2, caudae 2.1,/ tarsi 2.9, rostri a rictu 1.5.

Hab. Santa Rosa, Ecuador (Steere).

Obs. C. variegato et C. bartletti forsan affinis, sed staturâ majore/ et pectore griseo distinguendus./

This apparently undescribed Tinamou has the back conspicuously/ transversely barred as in *C. variegatus*, but is much larger than that/ species and has the whole of the lower part of the neck bownish/ grey instead of cinnamon. *C. bartletti*, described by us from speci-/mens obtained by Mr. E. Bartlett in Eastern Peru (P. Z. S. 1873,/ p. 311), is also a smaller bird, and has the whole under surface/ escept the throat fawn-colour; it also wants the light supercilium/ and the transverse marks on the occiput. In size the new species/ approaches *C. sallaei*; but the totally different colour of the under/ surface of this species renders further comparison unnecessary./

Prof. Steere's collection contains two specimens of this species,/ exactly resembling one another in colour, but differing slightly in/ size, the bird described above being the larger of the two.//

APPENDIX III

P. Brodcorb, 1937. Some birds of the Amazonian islands of Caviana and Marajó. *Occas. Papers Mus. Zool. Univ. Michigan* 349: 1-7.

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A SMALL COLECTION FROM CAVIANA

Apparently the only published reference to the bird life of/ Caviana Island at the mouth of the Amazon is a record of the/ flamingo (*Phoenicopterus rubber* Linnaeus) included by the/ late Dr. Snethlage in her "Catalogo das Aves Amazonicas" [1 Bol. Mus. Goeldi, 8, 1914: 112-113]. In 1871 Professor Joseph . Steere of Ann Arbor spent a month on Caviana collecting the birds listed below. His head-/quarters were at the *dazenda* of Senhor Lionel, where he ar-/rived on Januayy 20./

According to Steeres's notes, nearly the entire island is level/ campo covered with coarse grass and rushes and with a few/ low scrubby trees. There are many sluggish streans, and/ narrow strips of woodland extend along some of them from the wooded/ coast. In contrast to the sand of the mainland/ the soil is clay deposited by the annual overflow of the Amazon,/ which covers much of the island during the west season./

Four of the birds of Caviana have not yet been recorded from either of the neighboriung islands of Marajó or Mexiana./ They are *Phoenicopterus rubber*, *Pyrocephalus rubinus rubinus*, *Ostinops viridis*, and *Hemithraupis guira guira*.//

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- 1. *Dendrocygna autumnalis discolor* Sclater and Salvin. 1/ ♀ juvenile. "Eyes hazel; beak and legs red; beak above nos-/trils yellow"./
- 2. Cathartes urubitinga Pelzeln. 1 3. Wing 484 mm./
- 3. Buteo magnirostris magnirostris (Gmelin). 1 3, 1 not/ sexed./
- 4. Herpetotheres chachinnans queribundus Bangs and Pen-/nard. 1 [♂] adult. I fail to see any significant difference/
- between this bird and others from Maranhão and Paraguay./
- 5. Polyborus plancus brasiliensis (Gmelin). 1 [♀]♀ adult./ Wing 398 mm./
- 6. *Jacana spinosa spinosa* (Linnaeus). 8 ♂♂ adults, 1 ♀/ juvenile.;
- 7. Belonopterus chilensis cayennensis (Gmelin). 1 ♀, 1 not; sexed. Typical pof the race of northern South America./

- 8. Capella paragiaiae paraguaiae (Vieillot). 1 ♀./
- 9. Himantopus himantopus mexicanus (Müller). 2 adults./
- 10. *Columbra rufina rufina* Temminck. 1 *♂*./
- 11. *Leptotila rufaxilla* (Richard and Bernard). 2 \circlearrowleft \circlearrowleft , 1/ not sexed. "Eyes yellow; feet and line through the eyes/ brick red."/
- 12. Aratinga aurea aurea (Gmelin). 1 \circlearrowleft , 2 \circlearrowleft . "Eyes red-/dish yellow."/
- 13. *Crotophaga major* (Gmelin). 2 $\circlearrowleft \circlearrowleft$. "Eyes sea green,/ changing to yellow about the pupil. Food fruits and beetles."/
- 14. Trogon strigilatus albiventer Cuvier. 4 ♂♂, 1 ♀./
 Tr.[ogon] albiventer Cuvier, Régn. An., 2nd ed.,
 1, 1829: 459,/ note (based on Levaillant, Hist.
 Courouc. Et Tourac., Pt. 3,/ 1806: 10, Pl. 5)./

All five of these skins are strikingly different from 22 speci-/mens of *Trogon strigilatus strigilatus* Linnaeus from British/ and Dutch Guiana, Amazonas (Rio Branco), Pará district/ (Murutucú), and eastern Peru (Rioja). The belly and crissum/ are buffy white mixed with light orange-yellow, instead of be-/ing plain orange. I have not been able to consult Levaillant's plate, but it seems likely that his *Coroucou albane* is the bird//

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described here. The *Trogon melanopterus*² [²*Trogon melanopterus* Swainson, *Anim. in Menag.*, Pt. 3, 1838: 332 (Brazil; coll. W. Swainson)] cannot/ refer to the race with light underparts, since he states that the/ belly is yellow in both sexes. It is possible that the bird recorded by Snethlage³ [³ *Op. cit.*: 208] from Marajó may belong to the pale-/bellied form./

- 15. Guira guira (Gmelin). 2 & d, 1 not sexed. "Eyes white"./
- 16. *Chloroceryle inda* Linnaeus. 1 ♀. "Eyes brown; feet/ yellowish. Food small crabs"./
- 17. Galbula rufo-viridis Cabanis. 5 $\lozenge\lozenge$, 1 \lozenge , 1 not sexed./ "Eyes dark; legs yellowish"./
- 18. *Nystalus maculates maculates* (Gmelin). 2 ♂♂, 1 ♀./ "Eyes yellow".
- 19. *Ramphastos toco toco* Müller. 1♂, 1♀. Culmen 218/ mm. (♀ 191)./

The trimonial is used because, although not generally recog-/nized, *Ramphastos toco albogularis* Cabanis⁴ [⁴ *R[amphastos] albogularis* Cabanis, *Journ. für Orn.*, 10, No. 59, September, 1862: 334 (based on Azara, no. 50, Paraguay)] seems a perfectly/ distinct form on account of the constantly smaller bill. In/adults from Paraguay the culmen measures (in mm.) 169,/ 273, 174, 176, 182, 183 (146, 150, 152, 155, 157, 158,/ 158, 162). Moreover, Laubmann⁵ [⁵ *Wiss, Ergebn. Deutsch. Gran-Chaco Exped., Vögel,* 1930: 126] gives the bill measurements/ of adults from Argentina and Bolivia as 160 and 170 mm./

- 20. Scapaneus melanoleucos melanoleucos (Gmelin), 1 ♀./ Wing 176 mm.
- 21. Dendroplex picus picus (Gmelin). 1 \mathfrak{P} ./
- 22. Certhiaxis cinnamomea cinnamomea (Gmelin). 1 \circlearrowleft , 1 \circlearrowleft ./
- 23. Thamnophilus doliatus doliatus (Linnaeus). 1 3. /
- 24. *Thamnophilus nigrocinereus nigrocinereus* Sclater. 1 ♂/ juvenile, 1 ♀./
- 25. Attila cinnamomeus cinnamomeus (Gemlin). 1 3./
- 26. *Gymnoderus foetidus* (Linnaeus). 1 ♀./
- 27. Pipra aureola aureola (Linnaeus). 4 👌 🖒 . One of these//

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is an albinotic specimen with the red and orange replaced by/ pale yellow. Both this and the normal skins had the eyes/ recorded as white./

- 28. Xolmis cinerea (Vieillot). 1 adult./
- 29. Fluvicola pica albiventer (Spix). 1 ♂. "Eyes haze;"./
 The bill of this bird is noticeably wider than it is
 in skins from/ eastern Brazil and Paraguay./
- 30. Arundinicola leucocephala (Linnaeus). 1 3. "Eyes/red."/
- 31. Pyrocephalus rubinus rubinus (Boddaert). 1 ♂, 1 ♀./
 These two specimens do not agree with any of the recognized/ races of the vermilion flycatcher. The male has the crown a/ dull spectrum red; back natal brown; throat and breat near/ geranium red; crissum jasper pink. The female has the whole/ top of the head and back deep wood brown; flanks and crissum/ pink; remaining underparts whitish, straked with wood brown/ on the breast. They measure (in mm.) as follows: wing 74 (♀ 70), tail 54.5 (♀ 53.5), culmen 17(♀ 15.5).

Five topotypical specimens of *Pyrocephalius rubinus satu-/ratus* Berlepsch and Hartert from Venezuela, loaned by Field/ Museum, have the crown

pure scarlet-red in the male; back fuscous; throat and breat reddish scarlet; crissum light cotral/ redf. In the female the crown is largely scarlet-red; back natal/ broen; throat tinged with pink; remaining lower surfacer scar-/let, streaked with bone brown on the breast. *Saturatus* has the/ following measurements (in mm.): wing 71.5, 73, 74 (9968, 71.5), tail 50.5, 52, 53(50, 53), culmen 16, 16, 17(15.5, 17).

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78, 78, 79 (\bigcirc 72, 75), yail 53, 53, 53.5, 53.5, 54, 54.5, 55, 55,/ 55.5, 56, 56, 56.5, 57.5 (\bigcirc \$\hat{\Pi}\$ 52.5, 55), culmen 14.5, 24.5, 14.5,/ 14.5, 15, 15, 15.5, 15.5, 15.5, 15.5, 16, 16 (\bigcirc \$\hat{\Pi}\$ 15, 15.5)./

Sine *Muscicapa rubinus* Boddaert was described from the/ Amazon iver, I propose to recognize the southern birds as a/ separate race, which will bear the name *Pyrocephalus rubinusl strigilatus* (Wied).⁶ [⁶ *Muscicapa strigilata* Wied, *Beitr. Naturg. Bras.*, 3, No. 2, 1831: 200 (Camamú, Bahia)]. Specimens have been examined from the/ Province of Buenos Aires, eastern Bolivia, and the/ State of São Paulo, Brazil. A single male from Pebas, Peru,/ seems to agree with the southern birds, but ir is so worn and/ faded that its correct allocation is questionable./

- 32. Muscivora tyrannus (Linnaeus). 4 33./
- 33. *Tyrannus melancholicus despotes* (Lichtenstein). 1 ♂./
- 34. Myiodynastes maculatus maculatus (Müller). 1 \circlearrowleft , 1 not/ sexed.
- 35. Tyranniscus acer Salvin and Godman. 1 adult./
- 36. Turdus leucomelas albiventer Spix. 2 $\lozenge \lozenge \lozenge$, 1 $\lozenge \lozenge$./
- 37. Turdus fumigatus fumigatus Lichtenstein. 1 adult.
- 38. Coereba flaveola minima (Bonaparte). 1 3./
- 39. Geothlypis aequinoctialis aequinotialis (Gmelin).
- 40. Ostinops viridis (Müller), $1 \stackrel{?}{\circlearrowleft}$, $2 \stackrel{?}{\hookrightarrow} \stackrel{!}{\circlearrowleft}$.
- 41. *Archiplanus solitarius* (Vieillot). 1 ♂, 1 ♀. "Eyes dark/ red; bill bluish white".

- 42. Leistes militaris militaris (Linnaeus). 4 33./
- 43. *Gymnomystax mexicanus* (Linnaeus). 1 ♂, 1 ♀. "Eyes/ brown"./
- 44. *Thraupis episcopus episcopus* (Linnaeus). 1 ♂, 1 ♀./ "Eyes hazel"./
- 45. *Thraupis palmarum palmarum* (Wied). 1 ♀. "Eyes/ dark brown."/
- 46. *ramphocelus carbo carbo* (Pallas). 2 ♀♀. "Eyes/brown; feet and legs black; lower beak ash."/
- 47. *Hemithraupis guira guira* (Linnaeus). 1 ♀./
- 48. Volatinia jacarina splendens (Vieillot). 1 3. "Eyes/hazel". The underwing is mixed black and white./

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49. *Myospiza humeralis humeralis* (Bosc). 1 ♀, 1 not sexed./ "Eyes hazel".

SOME ADDITIONS TO THE AVIFAUNA OF MARAJÓ

Professor Steere made several trips to Marajó during the/ early part of 1871 and revisited the island in 1879. It is/ thought unnecessary to report all the birds which he collected/ there, and the following list includes only such species as are/ heretofore unrecorded from Marajó. I have also added a few/ species obtained for the first time on the island by Edward M,/ Brigham of Battle Creek, Michigan, during April, 1881./

- 1. *Dendrocygna viduata* (Linnaeus), Ararý,⁷ [⁷ Often spelled Araré] 1 ♀, 1 not/ sexed, April, 1871. "Eyes hazel; feet and beak black".
- 2. Buteo albicaudatus colonus Berlepsch. Ararý, 1 dadult,/ April, 1871. Wing 403 mm, tail 160 mm. Tail:wing index/ 39.7./

This is apparently the first record of the Guianas race in/ Brazil./

- 3. Hoploxypterus cayanus (Latham). Marajó, 1 &, 1871./
- 4. Columba speciosa Gmelin. Marajó, 1 3, 1871./
- 5. *Culombigallina talpacoti talpacoti* (Temminck). Ararý, 1/ juvenile, April, 1871./
- 6. Brotogeris tuipara (Gmelin). Ararý, 1 adult, April, 1871./
- 7. Chelidoptera tenebrosa tenebrosa (Pallas). Ararý, 1 Å,/ April, 1871. Wing 111.5 mm., tail 51.5 mm., culmen 22 mm./

This specimen is slightly larger than a series from Dutch/ Guiana and from mainland Pará (Vigia). Its nreast is grayer/ and suffused with ochraceous; the belly is a little paler rufous;/ and the upper tail coverts, rump, and crissum are tinged with/ buffy./

- 8. *Ramphastos monilis* Müller. Ararý, 1 ♀, April, 1871./ South Marajó, 1 ♀, 7 April, 1881./
- 9. Nasica longirostris (Vieillot). South Marajó, 1 ♀, 10/ April, 1881. "Eyes brown."/
- 10. Synallaxis gujanensis gujanensis (Gmelin). Marajó, 1/ 3, 1871./

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- 11. *Colonia colonus colonus* (Vieillot). Ararý, 1 Å, April,/ 1881. Wing 84 mm. (middle rectrices wanting).
- 12. *Tityra cayana cayana* (Linnaeus). Marajó, 1 [♀], April,/ 1881. Perfectly typical of the northern race./
- 13. Sturnella magna praticola Chubb. Rio Ararý (Fazenda/ McGee), 1 Å, April, 1871. "Eyes hazel." Wing 101 mm., tail/ 66.5 mm., culmen 34 mm., tarsus 40.5 mm., middle toe 28 mm./

This seems to be the first record for the genus south of the/ Guianas.//