Mapping Latin America
A CARTOGRAPHIC READER
Edited by Jordana Dym and Karl Offen
Atlantic and Pacific Junction, a map of the Isthmus of Darién, at the southeastern end of the Central American isthmus in what is now Panama, was produced and published by British civil engineer Lionel Gisborne in 1852 (fig. 24.1). The map is a lie, a misrepresentation of natural features. While the coastlines are relatively correct, mountain ranges have been moved or fabricated, rivers misplaced and elongated, and terrain elevations misstated by hundreds of feet. The errors in this map are not simply cartographic mistakes, generalizations, or attempts to fill empty space with symbols; they arose from a process influenced by incompetence, self-deception, and promotional zeal. Over the next decades these cartographic lies had serious consequences, including an enormous waste of time and money, the loss of dozens of lives, and the repeated invasion of indigenous lands.

How did such a map come to be? In this case we have...
more than historical context and supposition on which to base an understanding of the mapping process; we have the cartographer's private journal, and his later re-edited version of events. The map and journals comprise a telling example of J. K. Wright's warning: that when the sources for maps "are them-selves man-made, the subjective elements they contain are carried over into the maps based on them."

The height of the California Gold Rush was in 1852. Attempts to shorten the ocean route around South America or the difficult overland route across the United States were proposed by various promoters over several routes, including the Isthmus of Tehuantepec in Mexico, the Rio San Juan in Nicaragua, the Panama Route (where the present canal is), and the Isthmus of Darién, then part of the republic of New Granada (see chap. 35). Entrepreneurs from France, Britain, and the United States, often backed by their governments, vied for control of these potentially lucrative routes. National as well as commercial interests were at stake.

In 1851 and 1852 Edward Cullen, an Irish physician and failed Gold Rush entrepreneur, claimed to have walked several times across the isthmus from the Gulf of San Miguel to Caledonia Bay. Cullen characterized this potential canal route as requiring, "nothing whatever to be done but a simple cut." Cullen's promise of an easy route resulted in the formation of the Atlantic and Pacific Junction Company, a British group of promoters who hoped to cash in on the Gold Rush travelers. After acquiring a concession from the government of New Granada, the company commissioned Gisborne to travel to the Isthmus of Darién to survey and "verify" Cullen's route.

How is Gisborne's map a lie? Visually the most striking features of the map are the five mountain ranges. On the map, three of the ranges extend northward from Darién Harbor to intersect two longer ranges that generally follow the east-west arc of the isthmus. On this map, the river Lara originates in the southern of these two longer ranges and then flows southwest to join the Savannah River, which empties into the harbor leading to the Gulf of San Miguel and the Pacific Ocean. The Caledonia River is shown starting on the northern side of the same midisthmian range, flowing to the northeast, and emptying into Caledonia Bay on the Atlantic Ocean. A smooth black line follows the path of these three rivers, representing a proposed canal route across the isthmus. The profile of the route is shown in the upper right just beneath the map title and Gisborne's large signature, followed by the authoritative "C.E." of his professional title, civil engineer.

Of the five ranges described above, only the northern of the two mountain ranges paralleling the isthmus exists on the ground. This range forms the actual continental divide and is the source of the Caledonia River just a few kilometers from the Caribbean. On the ground where Gisborne places the southern range and the continental divide, there is the wide basin of the Rio Chucunaque, shown on the map offset to the north. In addition, the source of the Lara River is 43 kilometers from the source of the Caledonia River, not the 2 kilometers shown on Gisborne's map. Most significantly, the 150-foot lowest elevation shown on the profile section of the proposed canal route is actually over 900 feet above the level of either ocean.

How did Gisborne produce a map with so many serious distortions? On June 15, 1852, Gisborne and Henry C. Forde arrived on the Caribbean coast of the Darién at Punta Escocés. Two days later they set out with three sailors, a sketch map made by Dr. Cullen, compasses, a barometric altimeter, and provisions for five days, intending to cross the isthmus, verify Cullen's route, and map a canal route to connect the Atlantic and Pacific oceans. A few hours of difficult trekking through the coastal hills brought them to the Rio Acla, named the Caledonia River by the Scots, which Gisborne mistook for a western flowing tributary of the Savannah River, 60 kilometers to the southwest. Confused and lost, they spent the night in the hills. Gisborne, with no experience surveying in the tropics, imagined he "heard the roll of surf on a sea-beach," thinking it "might be the Pacific tide running up the Savannah to within six or seven miles of where we then lay." In the morning they were escorted by local Kuna Indians back to Caledonia Bay. After one night lost in the bush just a few kilometers from the Caribbean, Gisborne believed that he had "passed into the watershed of the Pacific and discovered a valley with an elevation of 40 feet connecting the continental divide with the Savannah River emptying into the Gulf of San Miguel and then to the Pacific."

Sailing west from Caledonia Bay, Gisborne and Forde crossed the isthmus by train and mule along the established Panama Route from Aspinwall (now Colon) to Panama City. There Gisborne hired a schooner to take
them to the Gulf of San Miguel in an attempt to cross Cullen's route from the Pacific side. On June 30, Gisborne began his ascent of the Savannah River, reaching its confluence with the Rio Lara on July 1. Leaving the Savannah, the party struck off to the northeast, to "examine the interior toward the Caledonia river." Soon lost again, Gisborne reflected on the nature of his explorations, perhaps already aware of the distortions that would appear in his maps: "There was always a conviction on my mind that the problem of an inter-oceanic ship canal was to be solved between Escoces and St. Miguel, and although I am not a disciple of predestination, hope led me to believe that I should be instrumental in the solution. When one subject engrosses all one's thoughts, and guides one's actions for several months together, a conviction favourable, or the contrary, is sure to follow. A dreamy hope of success strengthened by inductive argument; the cause of former failures leads to generalization of geographic features, founded on geological theories and topographical analogy; such at least was the case with me." One last attempt at surveying the route brought Gisborne ten miles up the Lara, after which he returned to the schooner and "plotted the course of the Savannah and Lara, with the land journey toward Caledonia" with optimism that overcoming "the few engineering difficulties" would soon lead to "marrying Mr. Atlantic to Miss Pacific." A few miles of walking southwest from Caledonia Bay and a few more northeast from the Gulf of San Miguel and Gisborne had completed his engineering survey, without having traversed any of the 43 kilometers between the Caledonia and the Lara. He concluded: "The facts are, that the distance between these two points is 23 miles, steep hills from 300 to 400 feet high exist near Port Escoces, and that the Caledonia river comes within seven miles of the Savannah, being separated from it by a range of hills from 150 to 200 feet high." After returning to England, Gisborne had his journal printed for "private circulation." Some months later, funded by the company and Dr. Cullen, Gisborne made his maps fit the notion that the Caledonia route was viable and had the typeset pages of his private journal modified for general publication. Gisborne removed text that contradicted his map such as the statement above about "the facts" and critical comments about Cullen, including the sentence, "I feel convinced Dr. Cullen never crossed from the Savannah to Port Escoces." In 1854, the British, Americans, and French sent expeditions to Caledonia Bay to explore the route so convincingly mapped by Gisborne. The British, under the command of J. C. Prevost, lost four men, while U.S. Navy Lieutenant Isaac Strain lost five. Lionel Gisborne returned then, too, finally revising his lowest elevation of the continental divide from 150 to 1,013 feet. Gisborne defended his explorations and his map, writing that he had "succeeded in penetrating a certain distance into the interior from both sides of the isthmus, bringing home some correct and some incorrect information." Over the next two decades other expeditions followed and failed to establish a viable route. Nonetheless, the notion of a canal from Caledonia Bay to the Gulf of San Miguel persisted. In the 1960s, a route parallel to Gisborne's became Nuclear Route 17, one of several sea-level canal routes proposed and mapped by the United States to be cut across the isthmus by detonating atomic bombs. These plans were abandoned after consideration of the impact of blast and radiation on people, plants, animals, and public opinion. The Rio Lara is now just a trickle passing under the Pan American Highway on its way to join the Savannah and the Gulf of San Miguel. Caledonia Bay remains a Kuna place, and Punta Escoces, disrupted from time to time by archeological expeditions, gold-mining operations, proposed naval bases, pipelines, and tourist facilities, is devoid of activity except for the fishing boats of Sukunya, the small Kuna settlement near the anchorage where, in 1852, Gisborne first went up the mast to "see as much as we could of the interior."

3. The total of isthmian travelers reached thirty-two thousand in 1852, a number not exceeded until 1868, according to John H. Kemble, *The Panama Route* (Berkeley: University of California Press, 1943), 253–254.

4. International interest, particularly British and French, was rampant throughout nineteenth-century Latin America, with private and public companies investing in mines, railways, and agriculture; see chaps. 23, 25, 31, and 33.


6. Points marked A, B, etc., are referred to in Gisborne’s *Journal*. Point I, for example, is the farthest point up the Savannah River reached by Gisborne.

7. On this, or any Mercator chart, one can measure the distance of a line by finding the number of minutes of latitude spanned by that distance at the edge of the chart between the endpoints of the line. Each minute of latitude is a nautical mile, or 1,852 meters.

8. Punta Escocés was named for the failed Scots’ Colony of William Paterson, the 1698–1699 disaster that ended Scotland’s hopes of establishing a viable enclave in the New World as well as the lives of some twelve hundred Scots who died from famine, disease, or Spanish musket balls. For an overview and an account of a recent visit, see Nat Edwards, *Caledonia’s Last Stand: In Search of the Lost Scots of Darien* (Edinburgh: Luath Press Limited, 2007).

9. The Scots’ Colony in Caledonia Bay was within sight of Aclá, Vasco Nuñez de Balboa’s settlement from which he reached the Pacific in 1513 and where he was beheaded by Pedro Arias de Ávila in 1519.


16. Lionel Gisborne, *The Isthmus of Darien in 1852: Journal of the Expedition of Inquiry for the Junction of the Atlantic and Pacific Oceans* (London: Saunders and Stanford, 1853). This is the “public” version of Gisborne’s *Journal* (see n. 1).


**Additional Readings**


