

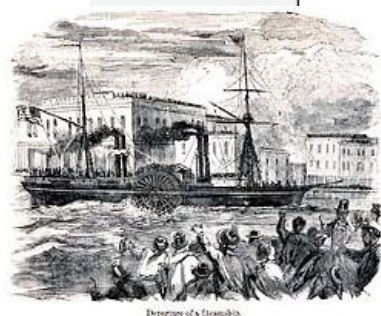
THE COAST SURVEY AND THE GOLD RUSH

Getting to California



During the California Gold Rush, many people from around the world left everything behind - including their jobs - to seek their fortune in California. A copy of one of the more interesting historical documents from this period resides in the NOAA Central Library. This document, *The Autobiography of James Lawson*, details the work of four young Coast Surveyors who were sent to the western coast at the height of the gold frenzy.

Lawson (image left), born in Philadelphia in 1829, was educated at the Philadelphia Central High School and became a clerk to Alexander Dallas Bache, the second superintendent of the US Coast Survey. Following the Mexican War and the acquisition of California, Bache sent survey crews to California in 1848 to commence the survey of the US west coast. The discovery of gold in California led to one of the great migrations of human history as fortune seekers, known as '49ers, from throughout the world rushed to California. This led to shortages of labourers, desertion of hundreds of ship crew in San Francisco Bay and desertion of many members of the survey crews with consequent lack of progress. To correct this situation, Bache handpicked four young men "who had a record to



make". The chief of this crew was George Davidson; the other three members were Lawson, the topographer A.M. Harrison, and John Rockwell.

Davidson (picture right) and Lawson travelled together and left New York City on the steamer *Philadelphia* on 5 May 1850. After an uneventful trip they arrived at the Chagres River, Panama, and off-loaded their survey equipment and personal effects for transport across the isthmus. They first engaged a native canoe for USD120, crewed by three Indians – a padron (a colloquial term for chief or boss) and two oarsmen. While boats of gold seekers raced up the river threatening and cursing their Indian boatmen, Davidson pursued a policy of respect and kindness, sharing coffee with them and letting them bathe in the river when they desired. Lawson played the tune 'Mary Blane' on his leather accordion, providing entertainment for all while travelling through the Panamanian jungle. As a consequence, they were the first from their ship to make it up the river to Cruces, at the head of navigation. Lawson described the décor of the natives during this leg of the trip: "The costume of these natives is at times extremely primitive. One of our boatmen, an Apollo in manly physique, was a large portion of the trip in full dress when he had a small piece of red tape around his left wrist."

Lawson and Davidson remained at Cruces for two days while awaiting a mule train to Panama City on the Pacific Ocean. The mules were not for carrying baggage, however, but for the travellers themselves. Lawson observed that two women "had very sensibly provided themselves with bloomer costumes, and in riding sat astride the animals. It was certainly a much more safe and convenient way to get through the narrow gorges and over the rough roads than the usual style of ladies' riding." The heavy surveying equipment was carried by human porters in cradles with straps around the shoulders and across the chest. One box weighing 180 pounds was carried by one man the whole distance of 21 miles.

The two young surveyors stayed at Panama City for about 10 days waiting for the arrival of the Pacific Mail steamer *Tennessee*, which had just begun service between San Francisco and Panama. In the city, they saw the sights including the cathedral and the old fort with its cannons as would all tourists; they bathed in the surf at the beach each morning and carefully watched what they ate and drank. They

chose to dine each day at a boarding house run by an American woman whose husband had died in Panama and avoided fresh fruit except daily squeezing the juice from an orange.

Finally, the *Tennessee* arrived and they obtained passage and stowed their gear aboard. As government surveyors, it is not known what their fare was; but some, in their desire to get to the California gold fields, paid as much as USD1,000 for their ticket. Once on board, the ship was extremely crowded, as two shiploads of passengers had been waiting in Panama for transit. The group of gold-seekers and soldiers of fortune making this transit included numerous unsavoury characters who, while in Panama, had pursued various forms of debauchery resulting in "Panama fever". In spite of this and the crowded conditions on the steamer, Lawson felt the health of the passengers to be quite good, noting that only two died on the trip to San Francisco.

Davidson and Lawson had their berths far below the main deck, and because of the filth and heat they chose to sleep in the main cabin of the ship. This served as dining quarters, but immediately after breakfast, this area was converted into a gambling parlour with various games run except during lunch and dinner. About 10 p.m. each evening, the gambling paraphernalia was removed and the passengers vied for space to sleep on the tables. Each "took up squatters' titles to as much as we could get and keep".

In spite of Monday through Saturday gambling, the games were not run on Sundays and various passengers, a lawyer among them, were moved to deliver religious sermons. The lawyer was a true gambling addict. Lawson described the lawyer's sermon thus: "A more terrific tirade on gamblers and gambling, it has never been my lot to hear. There was no term too strong to apply to gamblers, no tie too sacred for them to keep. Father, Mother, Wife, Child, all would be sacrificed to sustain the insatiable appetite. No crime was too great for a gambler to commit; and could he obtain no greater stakes, he would 'steal the pennies off a dead man's eyes'." The next day the lawyer was back at the table.

The *Tennessee* tied up in San Francisco on 19 June 1850, seven weeks after Lawson and Davidson had departed New York. Today, we can travel between those points in 5 hours. Even when tied up, things did not get easy. A fire had ravaged San Francisco a few weeks earlier and the planking of the pier had burned away causing great difficulty in transporting their equipment to shore. They spent about two weeks in San Francisco before booking passage south to Santa Barbara near where they would commence the great work of surveying the west coast of the USA. Their first astronomic station for determination of latitude and longitude was at Point Conception, a major landmark denoting the entrance to Santa Barbara Channel as well as marking the distinct bend of the California coast to the NW. As a side-note, the pay of Lawson and John Rockwell, whom they had met with in San Francisco, was USD30.00 per month while Davidson as party chief made USD35.00 per month. The cook they hired for camp would not work for less than USD125.00 per month.

James Lawson devoted the remainder of his life to the Coast Survey on the west coast and died in 1893 in San Francisco. He was at his desk three days before passing away. George Davidson went on to an illustrious career with the Coast Survey. He wrote the Pacific Coast Pilots, discovered a number of offshore hazards to navigation, led the group of scientists that visited Alaska to evaluate its resources prior to its purchase from Russia, was instrumental in developing the Lick Observatory, was a regent of the University of California and began the 39th parallel arc of triangulation on the west coast, among other accomplishments. He is commemorated by the naming of Davidson Seamount off the Monterey Bay area of California, Mount Davidson in San Francisco, the Davidson Mountains in Alaska, Davidson Bank off south-west Alaska and a number of other geographic features.

For those who are interested in learning more about the life and times of James Lawson and George Davidson, his autobiography can be found online at website 1. An incomplete biography (only till 1885) of George Davidson is available online at website 2.