

Electrical Development in the Sandwich Islands, 1891.

Electric Lighting Inquiry Unit

ELECTRICAL DEVELOPMENT IN THE SANDWICH ISLANDS.

BY

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As far as I am aware, little or nothing has ever been said about electrical development in the Sandwich Islands. I will therefore venture to tell the readers of *THE ELECTRICAL ENGINEER*, which is very well known in this part of the globe, what we have, what is needed, and what could be supplied with profit from the United States.

The Sandwich Islands are famous for their beautiful water-powers, and this power is being utilized for electrical work. The streets of Honolulu are lighted by 92 arc lights of 2,000 c. p. of the Thomson-Houston system, and the dynamos are driven by water-power. The same station furnishes 800 incandescent lights for residences and stores. This plant is the property of the Hawaiian Government. The Queen's Palace has a private plant of one Armington and Sims engine and two Thomson-Houston low-tension dynamos with a capacity of 800 lights. The Honolulu Iron Works have a plant of 75 lights, operated by a Mather incandescent dynamo. The Union Iron Works have an Edison plant of 75 lights. This enterprising concern have a Thomson-Houston motor in their pattern shop, and have now ordered a welding machine. The Oahu Railway has a private plant. The Waianae Plantation runs an arc system, not only out in the cane pieces but in the sugar mill. Nearly all the island steamers are furnished with electric light plants, annunciators, &c. The residences of planters on the other islands are also well supplied with the electric light.

Besides this, Mr. James Campbell, a wealthy land-owner, has installed at his Wikipi residence an accumulator plant furnished by the Edco Co., of Philadelphia; and Mr. Wilder, of the Wilder Steamship Co., has an accumulator plant at his residence. This is not a bad showing for the electric light.

The telephone industry is also in good condition. Honolulu itself has a population of 22,000 and a telephone system of 1,200 subscribers. On the island of Hawaii there are two telephone companies—the Hawaii Telephone Co. and the Hilo Telephone Co. The Maui Telephone Co. is on the island of Maui, and the Kauai Telephone Co. is on the island of Kauai. The telephones in use are from the American Bell Telephone Co., of Boston. The large plantations have also extensive private telephone service of their own. All telephone instruments and material are free of duty when entered by the company itself, giving the company an advantage over the merchants in the importation of electrical goods. Copper wire is extensively used in the construction of telephone lines, because of the salt air. A No. 12 iron wire circuit 9 miles long has been known to fall to pieces in less than two years, owing to the chemical action of salt water spraying on the galvanized iron.

There is also a general use of the telegraph in the island, and one hears a great deal about submarine cables between the Sandwich Islands and the American Continent. The great need of the kingdom is inter-island cable communication.

I might add that *THE ELECTRICAL ENGINEER*, with its well-filled pages of electrical knowledge, news and advertisements, is a familiar periodical, found on every island of the group, in the workshop and the plantation, in government offices and in the importing houses of merchants, through whose agencies a large quantity of electrical goods is imported.



Source: Historic American Buildings Survey, Creator, King Kalakaua, T J Baker, C J Wall, and Isaac Moore. Iolani Palace, King & Richards Streets, Honolulu, Honolulu County, HI. Hawaii Honolulu Honolulu County, 1933. Documentation Compiled After. Photograph. <https://www.loc.gov/item/hi0047/> Accessed 24 May 2018.

*Also see IEEE Milestone [Electric Lighting Of The Kingdom of Hawaii 1886-1888](#)

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