

being of recent origin, cannot of necessity have deep soils; but, with their white beaches, placid lagoons, and soft vegetation, they form the most picturesque feature of ocean scenery.—The fertility of the Polynesian islands of volcanic origin, in esculent fruits and roots, and other food plants, surpasses that of all other parts of the world. The bread-fruit tree (whose unripe fruit is baked and eaten as bread) is the staple article of the diet of the natives,—except in the Sandwich Islands, where the kalo root, prepared into a sort of porridge called "poi," is the national dish. Other abundant articles of food are the plantain, the pandanus, the arrowroot, the yam, and the sweet potato; while the orange, lemon, lime, grape, tamarind, pomegranate, custard-apple, mango, and fig, besides the cotton plant, the sugar-cane, the rice plant, the indigo plant, and the tobacco plant, grow luxuriantly wherever introduced. In the coral islands the vegetation is not so luxuriant as in the volcanic islands; but on them everywhere, in the fullest perfection, the coconut tree abounds, and furnishes to the inhabitants food, drink, clothing, household utensils and furniture, tools, weapons, cordage, and medicine.

**2. The Sandwich Islands.**—The Sandwich Islands constitute the Kingdom of Hawaii, and are the largest and most important of the islands of Polynesia. The native people are an intelligent, skilful, and progressive race. They were the first of the Pacific Islanders to put away their idols—this they did voluntarily; and subsequently, through the efforts of American missionaries, they have become Christianized and civilized. Unfortunately, however, they are rapidly dying out. Many Americans, British, and Portuguese, are settled in Hawaii, and control its industries. There are also many Chinese.—Situating on the ocean highway between America, and Asia and Australia, Hawaii is destined to become of great commercial importance.

*To the Teacher.*—The Sandwich Islands are all mountainous and volcanic, though they are fringed and reeved with coral, as are so many other of the volcanic islands of Polynesia. Hawaii, the largest of the islands, contains two active volcanoes, Mauna Lea and Kilauea. The crater of Kilauea (which, however, is but a hill on the side of Mauna Lea) is the largest in the world: it is 9 miles in circumference; its vertical sides are 1,000 feet deep; and its bottom is covered with a lake of liquid lava, at one end always red and boiling.—Owing to its trade relations with the United States and its favored position, the Kingdom of Hawaii has an important export trade. Sugar, rice, and coffee (produced in plantations established by foreigners), are the principal exports; but pulu (a fibre used for upholstering), hides, and wool, are also exported.—The government of the kingdom is modelled upon that of Great Britain. Education is well provided for, and all the natives can read and write. English is fast becoming the sole language of the islands. HONOLULU (20,487), the capital, has regular steamship connection with Yokohama, Sydney, Wellington, San Francisco, and Vancouver.

THE SOCIETY ISLANDS and the FRIENDLY ISLANDS are the two most important remaining groups of Polynesia. The Society Islands are under French rule; the Friendly Islands are independent, and have established a form of government somewhat similar to that of Great Britain. Both groups have been successful fields of missionary enterprise.

## LESSON XLVI.

### THE GREAT TRADE ROUTES OF THE WORLD.

**1. Water Routes.**—Commerce between distant countries is always effected, wherever possible, over water rather than over land, since for long distances water-carriage is cheaper than land-carriage, even by railway, although it is slower. In all navigation sailing-vessels were formerly used; but of late years steamships are displacing sailing-vessels very largely, the reason being that they are much more certain and regular in their trips, and that they can take routes which to sailing-vessels are impossible.

*To the Teacher.*—Another reason for this change is, that while the building of sailing-vessels has almost reached perfection, steamships are being constantly improved—in strength, in carrying capacity, in speed, and in economy of maintenance. Formerly, too, all vessels, both sailing craft and steam craft, were built of wood; now they are built altogether of iron, and even of steel. As illustrative of the superiority of steamships to sailing-vessels it may be stated that in the important traffic between England and China, which used to be effected by sailing-vessels sailing around the Cape of Good Hope, the quickest passage that could be made was over 90 days in length. Now, steamships can make this trip by way of the Suez Canal in 28 days. The construction of the Panama Canal will have a similar effect on the traffic between New York and San Francisco, and between England, and Japan and China, and perhaps do away with sailing-vessels on the route *via*

Cape Horn altogether. Again, the passage from England to Australia by the fastest sailing-vessels used to take 60 days; now it can be made in steamships in less than 34 days. Steamships have been greatly improved within even the last few years; and many now can make from 18 to 20 knots an hour (a "knot" is a nautical mile, and is equal to 6086.7 feet); and can maintain this speed for days together; so that the Atlantic voyage from New York to Liverpool, that used to take sailing-vessels from three weeks to a month, and not long ago even the fastest steamers 14 days, to accomplish, can now be made in a little more than 6 days.—Even on our Canadian lakes, steel-built steamships are displacing all other kinds of craft.—Assist the pupils to trace on the globe the following routes:—(1) From Quebec to Liverpool *via* the Straits of Belle Isle and the North Channel. (2) From Quebec to Glasgow *via* Cape Race. (3) From Halifax to Liverpool *via* St. George's Channel. (4) From New York to (a) Liverpool; (b) London; (c) Hamburg. (5) From Fort Nelson (Hudson Bay) to Liverpool. (6) From Southampton to New Orleans. (7) From San Francisco to Sydney (a) *via* Honolulu; (b) *via* Wellington. (8) From San Francisco to Canton. (9) From Vancouver to Yokohama. (10) From Sydney to London *via* Batavia and Singapore. (11) From London to Foo-chow. (12) From Plymouth to Cape Town. (13) From Halifax to Jamaica. (14) From Baltimore to Rio Janeiro. (15) From Port Arthur to Montreal. (16) From Quebec to Charlottetown and Halifax.—Question the pupils as to the commodities that would naturally be exchanged over these routes.

**2. Land Routes.**—In all enterprising communities, wherever the physical nature of the country makes their

