

Meanwhile the native population is steadily decreasing. In 1823 there were 142,000, against 40,000 in 1884; and the foreigners, including the half-castes, are now as numerous, the sum total of the population being 80,578. The Chinese are the most numerous of the foreigners, amounting to about 18,000. Of the Caucasian element the Americans exceed all others in number. In fact, the islands are practically an American colony, and hence are entitled to such consideration from the U. S. government as is afforded by the reciprocity treaty. The decrease of the native population is due to bad influences introduced by foreigners. If it were possible to enforce rigorous laws relating to intemperance, licentiousness, and leprosy, and to train up the natives to engage in the most suitable occupations, the decrease might be stopped.

The most extensive business is that of raising sugar and selling the raw product to the California refineries. About eighty companies and firms are engaged in the business, and it is estimated that 90,000 tons, worth seven million dollars, will be shipped the present year. The best machinery and the latest improvements are employed in the manufacture of a superior grade. Most of the companies are controlled by Americans or persons of American descent, and the money hired to carry on the business is also American. Some prejudice has been felt against the business, because of the connection with it, in a very prominent way, of Mr. Claus Spreckels, an American citizen who has been very successful. He formerly controlled the sugar business of the islands, and was able to dictate his own prices to the planters. But the planters are now independent of him, as a new refinery has been started in California which actually buys and refines more sugar than Spreckles' establishment. It is fortunate for the Hawaiian government that this gentleman is so largely interested in the islands, as he is able to assist them by loaning funds, though, it must be confessed, with large interest. Perhaps for this reason he has recently reaped a golden harvest by carrying out the principles of the silver metallists. He had the contract for furnishing the government with a million dollars' worth of silver coin, according to the American standard, and realized from the transaction the difference in value between the silver and the gold.

It is unfortunate that the politicians stopped the investigations of Dr. Arning into the nature and possible cure of leprosy. He had instituted experiments with animals and condemned criminals, illustrating the propagation of the disease, and had discovered methods of ameliorating certain

stages of the malady. Nothing could contribute more to the welfare of the Hawaiian kingdom than researches of this character; and the removal of so efficient an experimenter for merely political reasons shows the prime cause of the decadence of the nation. What the government will be in the future, with its mixed population, no one can predict.

There is a social science club in Honolulu, meeting once a month, where questions of social, political, and physical science are vigorously discussed. The June assembly was held at the house of S. E. Bishop, whose name is familiar to the readers of *Science* as the discoverer of 'Bishop's rings' around the sun. Mr. Charles Cooke read a paper upon corporations, enumerating all the legal corporate bodies in the kingdom, followed by Chief Justice A. F. Judd upon the early history of the nation. The premier, Mr. Gibson, had said that the natives had done the most for the welfare of the nation, but Mr. Judd showed conclusively that the early missionaries had often saved the kingdom from destruction, especially when threatened by the irresponsible American, English, and French naval commanders. Had it not been for the prudence of Richards, the elder Judd, and other Americans, bombardment would certainly have followed the threats of those dissolute foreigners. The admirable constitution is due to the advice of the same missionary worthies. K.

Honolulu, July 4.

#### NOTES AND NEWS.

THE U. S. geological survey has partially mapped out its work for the present year. It will extend over a large portion of the United States. There will be nine parties at work in Virginia, West Virginia, Kentucky, Georgia, North Carolina, South Carolina, Alabama, and Tennessee. Prof. A. N. Thompson will have charge of two field-parties in Oregon, two in California, one in Arizona, three in Texas, and three in Montana. Professor Renshaw will have charge of three parties which will do work in Kansas and Missouri. Four parties working in Maryland, Massachusetts, and New Jersey, will be under the direction of Professor Baker. The chemical laboratory of the survey, which is located in the national museum, will continue during the summer months the examination of rocks, minerals, soils, and other matters necessary before the survey's work is published.

— The coast-survey work is still embarrassed, owing to the lack of funds to continue operations; and no further instructions have been given for field-work, pending the passage of the appropria-

tion bills. Mr. W. C. Hodgkins, who has been prosecuting the work of the survey on the North Carolina coast, near Cape Lookout, has returned to Washington, and is stationed at the office for the present. New editions of the charts of the north-west coast of America will be out within ten days.

—The total amount subscribed to date to sustain the Pasteur institute in France is \$113,719. The sultan has presented Pasteur with the grand order of Medjidie, and \$2,000, and will send a commission to Paris to study his methods of rabies prevention.

—Sixteen of the wolf-bitten Russians who were treated by Pasteur have reached Smolensk on their way home, and, being in perfect health, have telegraphed their gratitude to their preserver.

—Professor Ormond Stone has just issued part ii. of the first volume of the publications of the new Leander McCormick observatory. Part i., an account of the observations of the transit of Venus in December, 1882, was published in 1883. Part ii. is a small quarto pamphlet of seventeen pages, a series of notes on the tail of the great comet of 1882, accompanied by six plates of sketches made by the observers, Messrs. Leavenworth and Jones. These drawings will furnish useful material to those engaged in the interesting study of the theory of comets' tails, — a subject in which considerable interest has been aroused by the researches of Dr. Bredichin, director of the Moscow observatory.

—The Library bureau of Boston has issued the first number of a quarterly journal, *Library notes*, under the editorship of Prof. Melvil Dewey, librarian of Columbia college. While the journal is of especial value to the professional librarian, we should judge from an examination of the June number, and from what is promised for succeeding numbers, that it will also prove of considerable value to individual literary and scientific men who are interested in lightening the purely mechanical portion of their labors by the numerous ingenious devices which are constantly being brought forward. For instance, almost every scientific specialist nowadays finds it necessary to keep for himself a bibliography of some particular branch of his subject: he will find described in the number before us the size and quality of catalogue or index cards, with all the neat and convenient accessories which years of experiment or experience have pointed out to be best adapted to such purposes. The 'labor-saving notes' promise to be particularly useful to the lay readers, the aim being to bring to light, by co-

operation and an interchange of ideas, the best literary tools and methods.

—The Spanish government has recently decided to establish a 'Maritime station for experimental zoölogy and botany,' to be in charge of a director, one assistant, and two fellows, all salaried. It is to be opened to students from all parts of the world, the results of all investigations to be published by the department of public works. In addition to the salaries of the officers, two thousand dollars annually will be appropriated for its support. The site has not yet been fixed upon, and *Cronica cientifica* justly complains of the inadequate provisions made for its establishment and support. Spain is almost the last of the chief civilized nations to found a zoölogical station.

—Roetheln, or German measles, has been very prevalent in Savannah, Ga., during the past year. This disease is very rare in the United States, and there are many physicians of established practice who have never seen a case. It prevailed in New York City during 1873 and 1874. As a rule children are attacked, but it is not exclusively the young; an old lady of seventy-seven was affected with it in the Savannah epidemic. It resembles both measles and scarlet-fever, so much so that the diagnosis is sometimes very difficult. It is contagious, and usually very mild, requiring but little treatment. Although it is doubtless a germ-disease, the specific microbe upon which it depends has never been identified.

—The legislature of Vermont at its last session passed a law prohibiting the adulteration of maple-sugar or honey, and punishing the offender with a fine of from twenty-five dollars to fifty dollars.

—M. Lessenne claims that a certain sign of death is the permanent gaping of a wound made in the skin by puncturing it with a needle. If the person be living, blood will usually follow the withdrawal of the needle, but whether it does or not, the wound will close at once. The puncture made in the skin of a dead person will remain open, as if made in leather.

—The North Carolina state board of agriculture, on Thursday, July 22, opened the new buildings of the experiment farm, near Raleigh.

#### LETTERS TO THE EDITOR.

\*\*Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

#### Glaciers and glacialists.

IN a note on glaciers in the Alps in the number of *Science* for June 25, p. 570. are the following words: "The longest is the Aletsch glacier in Austria, measuring over nine miles."