Scientific American.

THE SAMOAN ISLANDS.

The annexation of Hawaii has more than ever made it important for us to sustain our rights in the Samoan Islands, for they are located about 2,000 miles south and 300 miles west of the Hawaiian Islands. They lie in an almost direct line between San Francisco and Australia and slightly south of the direct steamship route between the Philippines and a possible interoceanic canal. The group consists of ten inhabited and two uninhabited islands. Their area is about 1,700 square miles, and the population is about 36,000, of whom less than 500 are Americans or Europeans. The islands are volcanic hills rising precipitously from the beach, and the tropical vegetation is very dense and of an intensely vivid green, characteristic of the tropics. The islands are fertile, producing cocoanuts, cotton, sugar, and coffee. The most important product is cocoanuts, from

which the "copra" of commerce is obtained, which is used in the manufacture of cocoanut oil.

The Samoan Islands have had a checkered existence and have been from time immemorial under two royal houses, but a number of years ago Malietoa became sole king, and in 1877 he was deposed by the German government upon the claim of unjust treatment of German subjects, and he was deported to German New Guinea, and finally to Hamburg. A native chief was proclaimed king by the Germans, notwithstanding the protestations of the British and American consuls. Mataafa, a near relative of Malietoa, made war upon the native chief who had assumed the kingship, and wrested the throne from him. In 1889 a conference between the representatives of the three powers most closely interested was held at Berlin, in which a treaty was signed by the American, British and German officials, by which they guaranteed the neutrality of the islands, so that the citizens of the three signatory powers would have equal rights of residence, trade and protection. They agreed to recognize the independence of the Samoan government and the free right of the natives to elect their king or choose their own form of government. A supreme court was established, consisting of one judge, who, at present, is an American, Mr. W. L. Chambers. To this court is referred all important suits.

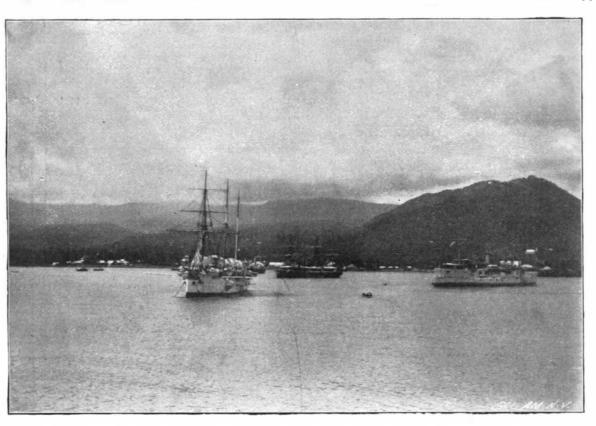
Malietoa was restored as king in 1889 and continued on the throne until 1898, when he died. The consuls of the three powers, with the chief justice as president, then took charge of the administration, pending the election of a successor. It is out of that election and recognition of the successor of King Malietoa that the recent disagreement between

the representatives of the three governments maintaining joint protectorate over the islands has occurred, and the insurrection of the natives, which has resulted in the death of several British and American officers and were

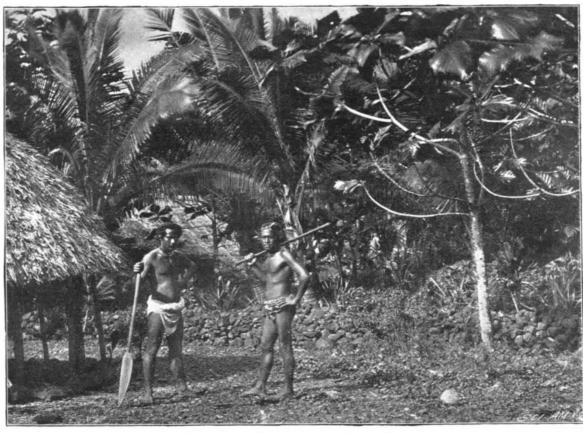
A combined British and American landing party was ambushed on a German plantation near Apia, on April 1. The British and Americans numbered 105, and they were surrounded by 800 Mataafans. The automatic gun of the allies became jammed, and had this not occurred it is probable that the result would have been different. After a desperate fight the American and English force was driven to the beach, where they were protected by the guns of the British and American warships. The dead were mutilated by the natives; their heads being cut off. Four Americans and three

British were killed. Our engraving represents the war vessels of the three powers in the harbor of Apia. At the right is the United States cruiser "Philadelphia," next is the British cruiser "Porpoise," while on the extreme left is the German cruiser "Falke." The British gunboat "Tauranga" was also present. After the ambuscade, negotiations were started which ended in an agreement which insured the departure of three commissions for Samoa, one delegated by each nation, armed with powers by which they were not only judges but governors, superseding the consul-generals, and their decrees are to be the supreme law of the land, subject to the general act of Berlin for the tripartite government of Samoa.

The natives of Samoa live in rude huts usually surrounded by an inclosed yard, which is paved with small pieces of lava. The floors of the dwellings are



WAR VESSELS IN APIA HARBOR—THE "FALKE," "PORPOISE." AND "PHILADELPHIA."



NATIVE SAMOANS AND THEIR HUTS.

of the same material, over which woven mats are spread, covering the sharp points of the stones which form the floor. The houses rest on central and outer posts, and the space between these is shut off by means of palm leaf mats so as to keep out wind and rain and to provide protection at night. The framework of the roofs is covered with leaves of the sugar cane which are very skillfully put together. The harbor at Apia is surrounded by coral reefs which are the cause of many shipwrecks. The Samoans, who spend a great deal of their time on the water, know these reefs thoroughly, and their services are invaluable to navigators. The natives are seldom seen in their original costume, and the men as well as the women of those regions which are most visited by foreigners wear a skirt-like garment and a light jacket. Most

Samoans of sixteen or more are tattooed in spite of the painfulness of the process and the opposition of the missionaries.

A New Use for Toy Balloons.

The increasing risk of collisions at sea, with all their terrible consequences, stimulates the interest that would in any circumstances be aroused by a rational proposal for reducing the danger of death by drowning. A Frenchman, M. Charles Janet, has recently carried out experiments at Beauvais with the object of proving that by means of India rubber "balloons," as children call them, which may be carried in a very small compass and rapidly filled with air in time of danger, a person who knows nothing of swimming can keep afloat in the roughest water. Nothing could be more simple than the apparatus, and it can be put into

a box no larger than a lady's purse. It consists of a yard or so of whipcord, to which are attached four " balloons," rolled up, and what is necessary for blowing them out, and keeping them afterward air-tight. The balloons should be filled only to about half of their full extent, so that they may offer sufficient resistance to the waves. This resistance is very remarkable considering the lightness of the material. M. Janet's children having fastened the apparatus just described to the upper part of the body, jumped into water thrown into violent commotion by the opening of sluice gates, and although they were whirled in the eddies and drawn under by the force of the current, their disappearance was only momentary, whereas strong swimmers in the same circumstances would have run the risk of drowning.

The Current Supplement.

The current SUPPLE-MENT, No. 1218, has many articles of great interest. "The Ice-Breaking Steamer 'Ermak'" describes the singular vessel which is to be used for battling with ice in the Baltic. The construction is fully illustrated. "The Secret History of Smokeless Powder" is an interesting and important paper revealing many facts connected with its history not hitherto known. The second lecture in the University of Pennsylvania course, entitled "Peculiar Laws and Customs in the American Colonies," was delivered by Dr. Herman V. Ames, Instructor in American Constitutional History at the University of Pennsylvania. The first installment is published this week. "The Mine Defenses of Santiago Harbor" is a valuable article by Lieut. E. E. Capehart, and is an authoritative account of all the mines which protected that harbor during its blockade. Zickler's "System of Elec-

tro-Optical Telegraphy" is also fully described.

Contents

(Illustrated articles are marked with an asterisk.

(Indstrated articles are
Alaska, scientific excursion to 282 Animals as carriers of disease 280
Annapolis Naval Academy*275, 283 Automobile regulations in France
Babylon, excavation of
Cask, knockdown*
"Columbia," yacht
Fog dispeller
from*. 27 Gun explesion at Sandy Heok*. 28 Inventions, index ef. 28
Limb, pneumatic
Maps, topographical

en(s.
arked with an asterisk.)
Maxim. letter from Mr
Moss, uses of Florida
Naval Academy*275. 28 Notes and queries28
Ozotype
•ut*
Science notes
Stoves in Korea
Tube cutter and expander* 2 Typewriter ribbons, durability
Vertex metien, nevel preduction
Yacht " Columbia "