# Scientific American.

and two smaller vessels, while there are the added advantages of an ample and unobstructed channel for the passage of ships from the East River to the dry docks, and that the vessels in taking up their berths at the new piers would be out of the heavy tideway which at present sets up and down the Cob Dock.

The plan of reconstruction also provides for two covered marine railways on the Cob Dock for hauling and storing torpedo boats. At present the boats are hauled out on temporary ways on the Brooklyn side,



CHIEF OF TETUILA-MOUNGA.

where the work of painting and repairs is often seriously delayed by the weather. The New York Navy Yard, as thus reconstructed, will compare favorably with the best of the European navy yards.

### BUILDING WHARF AT PANGO PANGO.

Pango Pango harbor on the island of Tetuila, one of the Samoan group, is a possession of great value to a power like the United States with world-wide commerce and increasing interests and responsibilities so diversified. Though surpassed in extent by some of the harbors of Australia and China, there is not one whose advantages are greater and where the safety of a fleet from storms or attack, is so assured or so easily provided for. The island itself is volcanic and the harbor originally a crater. The dimensions of Tetuila is about thirteen miles in extreme length and is one vast range of mountains, some them 3,500 feet high.

The harbor is an ideal one with a narrow and deep entrance about one-third of a mile in width. Its dimensions are one by one-fourth miles, and throughout its entire extent a depth of forty fathoms is maintained. It is surrounded by high hills and the most violent storms of that latitude do not affect it.

The United States intrusted to a San Francisco firm the construction of a wharf 300 feet in length with a face of 400 feet, to be built of steel, which is now underway and will be completed in September. In addition coalsheds of corrugated steel capable of storing 6,000 tons are being erected and will be completed at the same time. The work is making rapid progress.

The inhabitants of Samoa are said to be delighted at the prospect of becoming attached to the United States. The more intelligent among them realizing the advantages of being protected by a powerful nation. They are all nominally Christians, though not all of one sect. Most of them follow the English missionaries, though a few are Catholics. A good many heathen superstitions and customs survive. The women are the most virtuous savages in the world, though their marriage customs seem to more civilized nations somewhat lax. The marriage relation endures only so long as mutually agreeable, when a separation is at once granted. Several of the workmen who are constructing the wharves have formed alliances with the natives who make good wives and are extremely proud of their white husbands. They are industrious and make good housekeepers. There are many chiefs among the natives and they are accorded certain privileges and great deference, but the paramount chief over all is Mounga, a magnificent specimen of physical strength, who stands 6 feet 2 inches in his bare feet. His wife is considered a fair type of an island beauty.

The island is productive and yields ample supplies of bread fruit, taro and bananas, which constitute the principal articles of food consumption. The waters also abound in fish, and the natives are very expert in catching them.

Besides the natives raise quantities of pigs and fowls, which they sell to passing vessels. The community is a happy one, and quarrels are infrequent.

The climate is very warm and lenervating, though the workmen employed at wharf-building enjoy excellent health.

The distance from Apia to Pango Pango is 82 miles, though the two islands are only separated by a narrow strait.

# Electricity from a Snow Storm.

William A. Eddy, at Bayonne, N. J., made some interesting tests on February 17 with a kite, his object being to make an electrical test of a snow storm. A 6-foot single plane kite was used, and it was attached to a steel wire. The brush discharge could be plainly heard followed by a 1-inch spark. The electrical activi-

ty with the kite at so moderate an altitude was the greatest that had ever been experienced, the effect being about the same as if a thunderstorm had been near.

# Driftwood on the Alaska Coast.

There is an extraordinary deposit of driftwood on the coast of Alaska, some 1,200 or 1,500 miles northwest of Seattle. A constant deposit of logs and driftwood has been going on for hundreds of years, and it is due to the phenomena of the tides, the Pacific Gulf Stream, the ocean currents and the peculiar formations of the shore-lines at that point. According to The Chicago Times-Herald, logs and timbers are readily identified there as having come from Japan, China, India and other localities of Asia, as well as from California, Washington and other parts of the American continent. There are fine logs of camphor-tree, the mahogany, the redwood and the pine. Some of these from the State

of Washington bear the names of the men who felled the trees, and the sawnills for which they were destined. Some logs 8 feet in diameter are often seen there, and some entire trees 150 feet long, evidently uplifted by the roots during some terrible tempest. The newer logs are without bark, and they are as hard as stone, due to their long immersion in salt water.

### Luncheons in Schools.

Luncheons were first introduced into the public schools of Boston five years ago, and their practicability has been established. There are now thirteen schools in all that are taken care of by the New England Kitchen managers, says The Sanitarium. The luncheons are served only in the high, Latin, and normal schools, as pupils have but one session, while in the lower grades there are two sessions and the children have about two hours at noon in which to go to their homes. At present the luncheons are served in the basements of the schools, where the light is poor and the facilities for handling the food are not of the best. In the new buildings provisions will be made for lunch rooms. The food is sold in combinations for five cents each, and ten cents supplies a fairly satisfactory meal. At the manual training-school at Cambridge, where the pupils perform considerable hard



SAMOAN METHOD OF PREPARING FOOD.

manual labor, the twenty-five-cent dinner has proved very successful. Only the very best materials are used in the cooking. The bill of fare for one day includes oyster broth, milk, cocoa, three kinds of sandwiches, graham, white, and coffee rolls, corn cake, custard, baked apples, cookies, and fruit. Everything at the schools is strictly home-made and is cooked under the supervision of those in charge of the work of the kitchen.

# The March Building Edition.

The Building Edition for March is a unique number being devoted almost entirely to beautiful houses which have been built at "Hillcrest Manor" and "Crag Terrace," in Greenwich, Conn. The houses possess many remarkable and individual features. The literary contents is of unusual importance. This is one of the handsomest numbers of this periodical which has ever been issued.

# The Current Supplement.

The current Supplement.

The current Supplement is appropriately called the "Niagara Falls Industrial Number," and forms a most valuable compendium of information relating to Niagara Falls, its history, geology, topography, railways, bridges, power plants, industrial establishments, etc. It is illustrated by thirty-five engravings. We believe that our readers will appreciate having all matters relating to the recent developments of Niagara in concise form within the limits of a single number. It will prove a valuable reference number for many years to come, illustrating as it does some of the largest hydraulic and electric machines ever constructed and some of the most interesting bridges ever built.

# SIGNAY

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