

of the Maine. We also inspected the fortress prison, Las Cabanas, and went through its long and devious underground passages leading to the numerous dark dungeons. Appalling in its magnitude and grandeur, and stupendous in the outlay of labor and money, it is a disgrace to civilization—a relic of inconceivable barbarity. We went also to Morro Castle. It is interesting more on account of its massiveness and design, enormous cost in labor and treasure, rather than its usefulness as a modern defense. A visit was made to the grand old fortress, El Principe, built without regard to cost, before the days of modern artillery, but after the perfection of the science of permanent fortifications. The cemetery is also well worth a visit.

Puerto Principe.

About forty hours on a Spanish steam coaster brings one to Nuevititas, the port of Puerto Principe City, capital of the province of the same name. The city has between 35,000 and 40,000 population, and is also clean as a pin, another object lesson for our own cities in that regard.

American Inconsistency.

Indeed, Americans may not be the only people who practice not what they preach, but they have high ideals and most decidedly like to enforce them upon others. One of the greatest industries of our country is the manufacture of intoxicating liquors. Yet we prohibit the Indians from making and drinking tis-win. At a council of the Apaches the chiefs protested. "White men make whiskey; white men drink whiskey; why they no let Indians make tis-win—drink tis-win?" No one could meet the argument, and all the officer could say was: "Well, General Crook has ordered me to have it stopped and I have to obey, not question, his orders." Then a small faction of our people conceive that American soldiers should not be allowed to drink beer, and ally themselves with those who want to sell soldiers poisoned whiskey. And run shady dance houses and concert halls, and get congress to prohibit the sale of beer on any military reservation, while a gin mill is running in the basement of the capitol and congressmen wipe their mouths while they vote for the prohibition. Truly consistency is a rare jewel—and probably we have no right to expect to find it in our own acts.

Political Situation.

Everywhere I have been I have tried to sound those I met, in a quiet way, for my own information, as to their own feeling and that of the Cuban people on the form of government they want. Without an exception they were in favor of annexation to the United States, and they aver that to be the feeling of all of the intelligent and educa-

ted classes of all property owners and business men, and annexation to the United States is opposed only by the ignorant who are still following the *ignis fatuus* "Liberty," of which they have no true conception and which they have not found under the occupation by American troops, and which they fear they will never find under the folds of our flag and which I am quite sure they will never find at all. I have yet to meet any man who believes that the Cubans can establish and maintain a government that will be any more satisfactory to the United States than that of the old Spanish regime. But supposing they can, supposing they establish and maintain an ideal government, they will have to have all the costly machinery of a general government. They will have to create and maintain a navy and an army, a custom service, lighthouse service, and fortify their harbors and maintain ambassadors and ministers at the capitals of all governments, and, if they have any commerce, consuls at all the great ports of the world and centers of trade, and worst of all, Cuba would be confronted by the tariff walls of all nations, while she is now begging for tariff concessions from us.

On the other hand, annexation to the United States means for her the most liberal form of government—that of one of our sovereign states, and probably more, for in that event she would doubtless retain all her land as did Texas. She would be exempt from all the expenses of a general government enumerated above, but best of all she would have free trade with all the states—the best market in the world for her products and for which she is now clamoring for concessions only. She would have the protection of the general government, assurance of a stable republican form of government and security for foreign capital investments which she so sorely needs to develop her rich resources.

This is only a base outline of the pros and cons in the case. Never in the history of the world has a people had such an opportunity. Cuba could well afford to pledge millions for annexation. Will she avail herself of the opportunity? That is to be decided by counting noses with all the chances that the majority settles a question right.

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SCIENTIFIC MISCELLANY.

The electrograph of Prof. Lancetta is now at work in several Italian observatories. It consists of an elevated wire or antenna, connected to earth through a coherer, which is affected by electric disturbances in the air and acts upon a recording apparatus. A lightning flash, for example, causes the coherer to ring a bell and make a pencil mark upon a revolving clock dial. With

an antenna forty feet high on an elevation without surrounding obstacles, a thunder-storm can be detected more than sixty miles away, and the apparatus is expected to do valuable service in signaling the hail-storms so much dreaded by Italian vine-growers.

For producing low temperatures down to 60° C. below zero, M. d'Arsonval recommends chloride of methyl evaporated in a porous vase. To reach 112° or 115° below zero, liquid carbonic acid or acetylene may be used, and may be conveniently dissolved in acetone. Liquid air offers the best means of obtaining greater cold. This should be slowly dropped from a silvered glass flask through a rubber tube into a quart vessel of silvered glass with double walls, the vessel being placed in a bath of gasoline. A little more than an ounce of liquid air suffices for giving 194° below zero for an hour.

A remarkable dependence of certain plants upon others of different kind seems to have been discovered by M. Noel Bernard, a French botanist. The orchids produce many seeds, some of them millions to the single plant, yet they are very rare plants, and it was long supposed to be impossible to grow them in any way except by transplanting the bulbs. Success with the seeds was at last reached by sowing them in soil that had contained the adult plant. From his investigation, M. Bernard concludes that the seeds germinate only after they have been penetrated by a certain species of fungus, and that infection of the soil, which would result from the roots of the older plants, is necessary for the cultivation of the young plants.

Mysterious dark bodies have been seen occasionally to cross the sun's disc. An English astronomer has collected accurate dates of nine of these transits, the earliest being June 6, 1761, and he finds that these dates indicate the existence of two unknown planets, within the earth's orbit, with periods of about 174 and 20 days respectively. One of these bodies must be nearer the sun than Mercury, with a mean distance of about 18,000,000 miles. The other is calculated to revolve between Mercury and Venus, at a distance of about 51,000,000 miles, and should have a diameter of 1,700 to 2,000 miles. At its most favorable position for observation, it would appear as a third magnitude star 30° from the sun.

Sunflower pith proves to have a specific gravity of only 0.028, while that of elder pith—hitherto thought the lightest solid—is 0.09, and that of cork is 0.24.