Claude Still Seeks Ocean Power

Engineering

Another Mile-Long Tube to be Sunk in Gulf Stream

SABOTAGE accomplished at the last minute in the launching of the giant tubing being laid out into the Gulf Stream at Matanzas, Cuba, to bring cold water to the Claude sea power experimental plant, caused the total loss of the 6000 feet of costly tubing, Georges Claude, French physicist and inventor, has informed Science Service.

This is the second time that his attempt to tap the cool depths of the ocean has ended in disaster; yet M. Claude announced in his cable that a third large tube of insulated sheet iron was being made in France and that it would be launched at the end of August. The first conduit was lost in launching last September.

More than a mile long, over six feet in diameter, the corrugated sheet iron tube when successfully placed will reach out from the Cuban coast and suck up water from a depth of over a third of a mile. This water will have a temperature of about 50 degres Fahrenheit.

This will provide the cooling water for Claude's unique power plant which, instead of heating water by burning fuel, will use the relatively hot surface water of the tropical ocean which is 35 to 40 degrees warmer than the cooling water to be brought by the conduit from the depths.

Awaiting the laying of the third conduit there may be seen on the shore at Matanzas Claude's unique power plant that in trial operated successfully on waste hot water at Ougree on a Belgian river. It makes use of a boiler, turbine and condenser, like ordinary steam stations. But instead of being heated by a flaming fire, his boiler is at the temperature of surface water. Instead of being subject to hundreds of pounds of pressure, its pressure would be much less than that of the atmosphere outside.

Even the low pressure of the boiler would be higher than that of the condenser, and consequently steam from it would flow through the turbine to the condenser. Water from deep in the ocean would maintain the low pressure of the condenser by cooling and condensing steam from the boiler and turbine.

Because this process involves relatively small changes of temperature and pressure, large quantities of cool condensing water and warmer boiler water are required.

Although M. Claude's experiments are costing many thousands of dollars, the present power plant is experimental rather than commercial. He intends that it operate only a few months after the cold water conduit is finally laid. The information that the ocean power plant will give him will be used in the design and construction of a modest industrial power plant of about 12,000 kilowatt capacity.

Engineers accustomed to conventional power plants have not viewed M. Claude's experiments with great enthusiasm but his record of achieving what others have called impossible have made many confident that his plans will succeed. M. Claude is a scientist and engineer of world-wide reputation. He invented the first successful process for making liquid air and liquefying other gases; he pioneered in the field of making liquid ammonia out of the atmosphere; he is the inventor of glowing red neon lights that shine on our streets at night. His inventions are capitalized at $150,000,000 in America alone.

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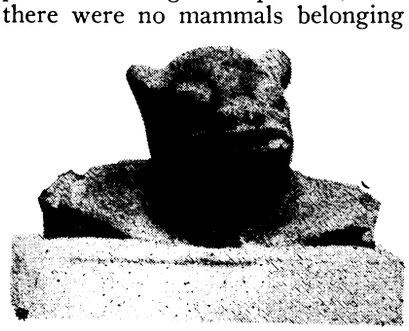
Columbus' Indians Made Them

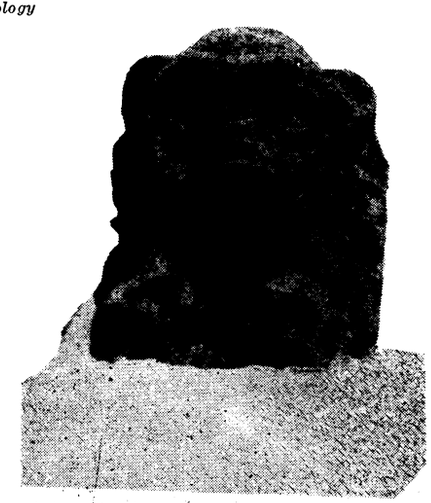
Archæology

LITTLE monkey heads, sad-faced or grinning, modeled out of clay to make handles for pottery jars, have been brought from Santo Domingo by Herbert L. Krieger, of the U. S. National Museum. These are some of the art works of Indians of the Arawak tribe which Columbus met in the West Indies.

Monkeys were never among the native creatures at home in the forests and villages of Santo Domingo, Mr. Krieger explains. The modeled monkey heads show that monkeys were brought there occasionally as pets or as rare importations from Mexico and Central America. Bones of monkeys, also unearthed by Mr. Krieger in Santo Domingo, fit in with this explanation.

The figurines and bones thus become bits of archæological evidence offered to the biologist who may be tracing the early animal life of America. The West Indies represent a peculiar biological "pocket", where there were no mammals belonging to





a period of earth history later than the tertiary. The land bridge linking the West Indies and Yucatan was broken off before the true age of mammals began, and the animal life of Santo Domingo consists of small types such as bats and rodents.

Jaguar heads modeled in clay were also found by Mr. Krieger, as shown in the left picture. These are taken to be evidence that the Arawak Indians of Santo Domingo must have remembered the animals of their earlier home, which was in South America. The later generations of Arawaks, who had never seen the jaguar, continued to copy old art models representing the animal, Mr. Krieger's new collections indicate.

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The Chinese honey bee is not only lighter in weight than the Italian honey bee, but it carries to the hive a smaller load of pollen in comparison to its size.