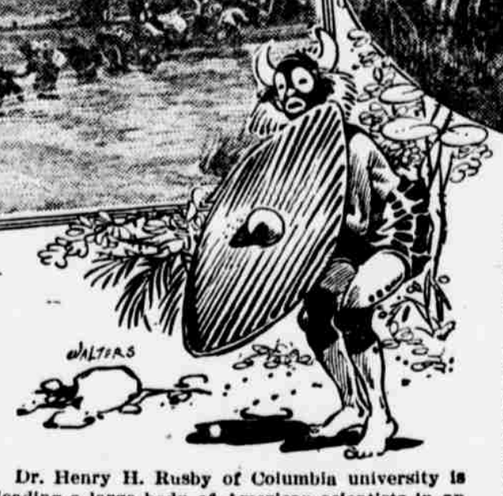
Exploring Earth's Many Mysteries

WOMEN OF TAHITI

MID ICE AND SNOW

IN AFRICA

ON THE AMAZON



THE airplane and airship mark the end of the silent places. So say the airmen and the explorers, the big-game hunters and the scientists. This statement, which is also a prophecy, is probably true. The next generation will find few of nature's wilderness solitudes left except in the national parks of the United States.

In the meantime, pending the adequate development of air travel, the explorers and the scientists are too impatient to wait for the machine that annihilates time and distance and topography. They must be at the work of prying into the few remaining mysteries of the earth.

Anyway, the spring of 1921 sees at least a score of expeditions on the way or in preparation.

The only international project is one to discover the origin of the Polynesian race of the South Pacific.

A Pan-American exploration of tropical America will be limited to nations of the western hemisphere.

An American expedition to British Guiana is commercially important in that it may uncover a new diamond field.

The third Asiatic expedition of the American Museum of Natural History to China to discover evidence that the "missing link" actually once existed is possibly the most scientifically important.

The project of the Royal Geographical society to ascend Mount Everest (29,002 ft.), the highest mountain in the world, is possibly the most fascinating.

Among the other exploring projects are the following: One to the Antarctic; six to the Arctic; four to Africa; four to Central and South America; one to Siberia.

The project to attempt to discover the origin of the Polynesian race originated at a recent conference of scientists in Honolulu, under the direction of the Pan-Pacific union, at which it was agreed to undertake a survey of the islands of the South Pacific. The countries interested in the expedition and which will have representatives with it are the United States, England, Japan, Canada, Australia, New Zealand, Hawaii and the Philippines. Yale, Harvard and other educational institutions are supporting the project. There never has been any doubt that the Hawaiian, Samoan, Tahitian, Tongan and Maori are closely akin. Their legends, speech, customs and build all testify to the relationship, but hitherto their origin has been lost in the mists of the ages. They are believed by many scientists to be of Caucasian origin. Meanwhile the Polynesian is dying fast; his race is passing out at high speed, and the investigations are being pushed with as little delay as possible.

Louis R. Sullivan of the American Museum of Natural History, New York, has been conducting investigations along this line. Bodily, facial and cranial characteristics of the Polynesian, according to Mr. Sullivan's tables, show that he is eleven parts Mongoloid, five parts European, five parts Mongoloid-European and two parts Mongoloid-Melanesian. His conclusion is that the Hawaiian and his Polynesian brothers originally came from Asia.

Systematical exploration and research in the interest of natural science will be started in the near future in Central and South America, should plans now being perfected by representatives of American scientific organizations meet with the anticipated success, Dr. A. S. Hitchcock of the Smithsonian institution announces. Under the supervision of a committee of scientists headed by Doctor Hitchcock, the institute for research in tropical America has been formed and preliminary arrangements for beginning its work completed in a series of meetings called by the national research council. In addition to exploration along botanical, anthropological, zoological, ecological lines, the institute plans to establish a system of research stations and laboratories in the tropics, at which scientific experimentation will be carried on.

Because of the necessity of limiting the scope of the organization's activities, at least until the time when it shall be entirely equipped to branch out, Doctor Hitchcock explains, countries outside the two American continents will not be permitted to participate. While the co-operation of all tropical American countries will be sought, it is proposed at present to admit representatives of South and Central American scientific bodies only to associate or correspondent membership.

Dr. Henry H. Rusby of Columbia university is leading a large body of American scientists in an attempt to explore the sources of the Amazon. Its immediate program is to traverse more than 1,000 square miles of the virgin land in the upper reaches of the river basin. Members of the expedition include Dr. David Starr Jordan, president of Leland Stanford university, and Dr. Carl H. Eigenmann of the University of Indiana, who will study fish and reptiles; Doctor Ruthven of the University of Michigan, who will study frogs; and Dr. Edward Kromers of the University of Wisconsin and Prof. A. H. Gill of the Massachusetts Institute of Technology, who will investigate seeds and volatile oils.

Two young Americans sailed from New York the other day for South America to search for a vast store of wealth supposed to lie in the "chimney" of the diamond deposits of British Guiana. At Georgetown, the capital of the British possession, they will be joined by a third adventuresome American who has outfitted in Paris.

The expedition is under the patronage of Harvard university and the Smithsonian institution of Washington, for which it will carry on geographical explorations. William J. LaVarre, Jr., a Harvard graduate of 1919, heads the party, and his fellow explorers are James MacDonald of Lima, O., and Dudley Lewis of Springfield, Mass. They expect to spend more than a year in the jungle.

Besides an attempt to follow the scattered deposits of precious stones several hundred miles through tangled, reptile-infested wilderness to their source, long known to exist somewhere in the hill country, but never discovered, the expedition will take observations of the aboriginal inhabitants and geological features of the country, as well as capture specimens of native wild animals for the Smithsonian institution and National Zoological garden at Washington.

Establishing headquarters in the prairie country 170 miles up the Mazaruni river, which flows into the Essequibo, the diamond hunters will begin work on the alluvial lands bordering streams on the eastern watershed of the Sierra Pacaraima mountains, which separate British Guiana from Venezuela.

The area in which the expedition will operate has been known since the middle of the last century as a rich diamond field, although its inaccessibility and the prevalence of tropical diseases have served to discourage prospecting by white men. Thousands of carats of the gems, said to be as fine as any in the world, however, are taken out annually by negro miners, employing primitive methods.

"Somewhere near every spot where diamonds are found in considerable numbers there must be a 'chimney'," explained Mr. LaVarre. The quality of stones taken from the vicinity where his party will work points to a "chimney" as rich or richer than those of the South African diamond fields.

The vanguard of the "missing link" expedition left New York the other day. The mission of the scientists will keep them in the vast untrodden areas of Asia for five years. When they return to America they hope to have evidence that the "missing link" between man and beast actually existed. Also they expect to bring back thousands of animal and botanical specimens to fill the proposed Hall of Asiatic Life in New York.

Roy Chapman Andrews, leader of two former scientific parties into China, heads the expedition. Joined in Asia by scores of native guests, huntsmen, cooks and helpers, the scientists expect to introduce American automobiles, moving-picture cameras and other modern machines on the Gobi desert, central Asian plateaus, Tibetan steppes and other little-known lands.

The first base of the party will be established in Mongolia, where the scientists expect to remain 24 months before penetrating western China. After the vanguard has spent a year in Mongolia, a second group of scientists will leave New York to join them. Northeastern and central Asia will be thoroughly gone over in a study of the origin and migration of man, to prove or disprove the popular scientific belief that Asia was the center of dispersal of the human race, as well as for many of the mammals the descendants of which are scattered over the earth. Next year the museum will send out geologists and a motion-picture photographer, and in 1923 archeologists and anthropologists will follow.

The Royal Geographical society is pushing ahead its plans for the conquest of Mount Everest, the highest mountain in the world, the summit of which no white man has ever reached. The main attempt will be made next year. Sir Francis Younghusband, the president of the society, has announced that Col. Howard Bury, who has traveled much in Asia, has been chosen to lead this year's expedition, with Harold Raeburn in charge of the actual reconnaissance of the mountain. Mr. Raeburn has just returned from a reconnaissance of Kangchanjunga, a mountain in the Himalayas with an altitude of 28,146 feet. The society is also hoping to secure the services next year of Brigadier General Bruce, the originator of the idea of ascending the mountain.

The ascent of Mount Everest is impracticable for many years at least, in the opinion of Henry F. Montagnier of Terre Haute, Ind., who has made many ascents in the Himalayas, the Rockies and the European Alps, and has attained the highest altitudes. He says:

"I have no hesitation in predicting that Everest will certainly not be conquered by the first party that makes the attempt. In my opinion it will take years, each party profiting by the experience acquired by its predecessors and each gaining a thousand or more feet on the previous record. One thing is certain, and that is that the conquest of the highest peak in the world will be far and away the most terrific test of endurance human beings have ever undergone. The journey to the north or south pole, as far as physical effort and moral courage are concerned, would be mere child's play compared with the ascent of a mountain more than 29,000 feet high. The highest altitude yet attained is about 24,600 feet.

"We know that the number of feet an active climber can ascend per hour diminishes with the altitude. Thus, up to 16,000 feet an average climber can ascend about 1,000 feet an hour over easy ground without exhausting himself. Above 23,000 feet the ascensional rate falls below 300 feet an hour even for exceptionally strong climbers. What it would be at 27,000 feet no one can say without experience.

"Judging by what we know of the diminution of the ascensional rate of strong climbers above 23,000 feet, it would seem doubtful whether it would be possible to ascend more than 100 or 150 feet an hour above 27,000 or 28,000 feet. And, moreover, these figures are based on the supposition that the party meets with no great difficulties, such as powdery snow, high wind, steep rocks, sickness, etc."

The one south pole exploration, now on the way, seems important. It is the British Antarctic expedition, headed by Commander John Lachlan Cope, fellow of the Royal Geographical society and formerly of the British navy. It has been financed for $750,000, and there will be five ships, 125 men, several airplanes and extensive wireless apparatus. The object is to circumnavigate the Antarctic sea, make a dash to the south pole, locate new whaling grounds and map fields that are supposed to be rich in gold, silver, coal and rubies. Plans have been made for an absence of five years.

Dr. Donald B. MacMillan, veteran of six trips to the Land of the Midnight Sun, heads the list of Arctic explorers. He is building at East Boothbay, Me., the schooner Bowdoin for an expedition scheduled to start in July. Under favorable weather conditions the Bowdoin should reach Fury and Hecla strait early in September. There the ship will be frozen in. Leaving their vessel under guard the party will push forward on sleds drawn by dogs. Doctor MacMillan expects to establish a camp 700 miles south of Etah, in northwest Greenland, from which he will try to circumnavigate Baffin Land and to penetrate 1,500 miles of its western coast, said to be the longest stretch of unknown coastline in the world.

Four expeditions are in progress in Africa, namely, the British Natural History museum expedition to penetrate the secrets of the west coast and of the Jeb-Maria mountains; the effort of the duke of the Abruzzi to find the source of the Webi Shebell river, which flows from Abyssinia through Italian Somaliland into the Indian ocean; the entomological tour of the Belgian portion of Tanganyka and the Eastern Congo, by T. A. Barns, who explored the Ituri and Semiki forests, finding a strange race of pygmies and making a wonderful collection of moths and butterflies, and the Mackie ethnological expedition into Central Africa to study the Bahima, one of the chief pastoral tribes of Ankole, a district west of Uganda.

Fuel From Wheat Straw.

A ton of sun-dried wheat straw has been found from the Canadian experiments to have a fuel value about equal to that of 32 gallons of gasoline. It yields about 10,000 cubic feet of purified gas, 600 to 650 pounds of carbon residue, and about 10 gallons of tarry liquid. The gas, which has a caloric value of about 400 British thermal units per cubic foot, burns with a blue flame, and has a slight odor. Its combustible constituents are carbon monoxide, methane and hydrogen. The carbon residue is capable of being reduced to a very fine powder.

Introspection.

"If a man would consult his mirror as much as a woman does he might learn a great deal about himself," remarked the near philosopher.

"I doubt it," said the observant citizen. "The average matinee idol is not half as good at self-analysis as some homely, bald-headed fellow who never sees himself in a mirror except when he shaves."—Birmingham Age-Herald.

Besides, Few Believe.

Jud Tunkins says a man who brags about leaving office poorer than when he entered it merely irritates the bill collectors.

When he has nothing to growl about the pessimist has a bad day.

The man in the honey-moon is no creation of the imagination.