hostess, said Mr. West. This third man will be called the flight engineer. He will be thoroughly familiar with the mechanical function of the entire plane. Seated in the cockpit behind the copilot, the flight engineer will have his own instrument panel and will relieve the pilots from much detail outside the navigation of the plane.

Science News Letter, March 20, 1937

ANTHROPOLOGY

Has Lost Pale-Face Tribe Been Traced to New Guinea?

DISCOVERY of a new tribe of lightskinned natives, in the treacherous depths of New Guinea, is stirring anthropologists to ask:

Did roving seafarers, some primitive branch of the white race, find their way to New Guinea in the South Pacific, there to lose themselves in the heart

of an island jungle?

That this did happen long ago, giving pale-face ancestry to a tribe that now numbers some 50,000 people, is the conviction of Jack Hides, discoverer of the tribe. These people in their lost world still live in the Stone Age. But they are not benighted savages. They raise spinach—much discussed vegetable in civilized circles. And they seemed extraordinarily healthy to their discoverer.

Mr. Hides, who brought this tribe of the interior to scientific notice, is a resident magistrate of New Guinea. His discovery, he finds, has awakened much interest among anthropologists. It suggested that New Guinea was settled by both whites and blacks—some branch of the Indo-European race, as well as the negroid people from Asia.

To Science Service, Mr. Hides gave the following description of how the unknown people impressed him:

"These people were short in stature. They were light-skinned, something similar to the Malays. They had large mops of brown-tinged hair, high cheek bones, and yet rather good features. They were bow and arrow people, and made beautiful axes of stone. They call themselves the Tarifuroro.

"Their methods of agriculture were the best I had ever seen. Their terraced gardens of an unusual squareness, marked off by pretty hedges of croton and hibiscus, were not unlike the Chi-

nese market gardens we see in Australia. "They grow sugar cane, ginger, bananas, sweet potatoes, spinach, mimica, and native asparagus. There were no taro or yams. They often brought us pretty baskets of brown salt, which they

obtained by burning logs of certain wood.

"I believe that farther to the westward of these people in the adjoining valley, which is even larger than the Tarifuroro, we will find an even larger population, and a more clearly defined Asiatic type.

"My reason for stating this is, as I traveled eastward across the Tari and Purari tableland, I found the light-skinned people merging into the darker-skinned Papuans, until just before I crossed the limestone barrier again, I found the real black Papuan men using the same methods of agriculture as the light-skinned Tarifuroro. It rather suggested to me that, at one time, these light-skinned people inhabited the whole of this tableland and were driven back westwards by the more virile Papuans."

Mr. Hides found the light-skinned tribe when he made an exploring journey, accompanied by a patrol officer, nine native policemen and 28 native carriers. Traveling up the Strickland River in a schooner, and thence up an unknown river to its source in dugout canoes, the party then climbed a difficult limestone barrier and found themselves on a high plateau inhabited by unknown thousands of New Guineans.

Doubt Expressed

It is not necessary to picture a white invasion of New Guinea, to account for the natives seen by Mr. Hides.

This is the view taken by an anthropologist noted for his studies of pygmies in New Guinea mountains. Matthew W. Stirling, chief of the Bureau of American Ethnology, says:

"There is an anthropological theory that an early wave of white migration swept across southern Asia to the Pacific. It is not impossible, if this be true, that traces of it might be discovered in the East Indies. Such an explanation has been offered for the Ainus of Japan and for the Polynesians.



OLD DOUBT

Mr. Howard shown examining the fossil horns of a musk ox-like animal and a stone weapon point found near the skull. Such inconclusive discoveries in various parts of America have long puzzled scientists. They could not agree whether ancient hunters were present when this kind of game roamed the country, or whether coincidence brought blade and beast near together.

"It is my opinion, however, that Mr. Hides probably encountered a new branch of the short-statured, light-skinned mountain peoples of the interior of New Guinea and passed from these to eastward toward the decidedly black-skinned Melanesians and was impressed by the contrast in skin color."

Science News Letter, March 20, 1937

PHYSIOLOGY

Illinois Giant Reported To Be Still Growing

EIGHT: 8 feet, 3½ inches; weight: 395 pounds; still growing.

That is the amazing record of 18-year-old Robert Wadlow of Alton, Ill., according to the latest authoritative medical record. The measurements, based on the boy's own testimony and hospital records, are given by Dr. Charles D. Humberd of Barnard, Mo., (Journal, American Medical Association, Feb. 13). In the medical report, the young Illinois giant's identity is concealed by the initials, R. W.

The great Barnum laid down minimum requirements for giants in his famous sideshows. But he required a mere 7 feet, 2 inches. The Illinois giant already exceeds this modest requirement

by 13½ inches and is still going up.

The young giant now picks his way about among the light fixtures in his modest home, where the ceilings are

modest home, where the ceilings are only a couple of inches higher than he is. Dr. Humberd, who makes a study of giantism, says he is still growing.

The Illinois giant belongs to the "preacromegalic type," thinks Dr. Humberd. The physician believes that the acromegalizing process is already beginning and that in the near future the bones and soft parts of the boy's hands, feet and face will begin to enlarge, an evidence of the overfunctioning of the pituitary body.

Acromegaly is a growth disturbance due to over-activity of one part of the pituitary gland. It usually starts after maturity and the overgrowth appears chiefly in face, hands and feet.

Robert is now a college freshman, embittered by newspaper publicity and reluctant to be measured or to discuss his Gargantuan build. He makes his pocket money by posing for photographs, for which "his charges are variable and modest, but certain," according to Dr. Humberd.

The boy's appetite is enormous, his daily food consumption running as high as 6,000 to 8,000 calories. He tires very easily and sleeps much.

The average grown man does not require over 3,000 calories a day unless he is doing work requiring great muscular exertion.

At birth, the boy weighed 8½ pounds and at six months, 30 pounds. His growth curve has been steady and continuous, without noticeable spurts and upsets, according to the physician's records.

"One cannot predict when the growth curve will level off," states Dr. Humberd. "I think the lad is still actively growing."

The height limit of the U.S. Army in the World War was 6 feet 6 inches. Among 3,750,000 men between the ages of 18 and 30, only seven cases of giantism were found. Four of these men were only a little over height and were accepted for army service in spite of their disability, some of them serving as drum majors in army bands.

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NEW PROOF

A bone spear point found resting on the foot of an extinct mammoth—giant long-haired elephant—in New Mexico. This discovery by Edgar B. Howard of the Philadelphia Academy of Natural Sciences, and his finding of stone spear points surrounded on all sides by mammoth bones, clinches scientific belief that America was inhabited by man when these prehistoric big game animals were still alive 10,000 years ago. (See SNL Oct. 10, 1936. For another discovery by Dr. Frank H. H. Roberts, Jr.; see also SNL Nov. 2, 1935).

MEDICINI

Growth Control for Cells Would Cure Cancer

FIND a method of growth control for the millions of tiny cells that make up the body of a man and you will have the long-sought cure for cancer.

Tremendous difficulties must be overcome before this happy solution of the problem can be reached. The individual cells of the body are so small they can be seen only with the aid of powerful microscopes. Each of them must have food and water and oxygen for breathing, in order to live and do its job. Scientists in many laboratories are trying to find what the cells require for nourishment and how much of these substances they must have.

Is it too much or too little of some foodstuff that makes cells go wild and spend all their energies in growing, so that other cells are crowded out and die? This tendency of cancer cells to devote their lives to malignant growth is probably inherited, born in them when they are first formed. Injury or irritation may be the torch that sets off the wildfire growth.

Many of the irritations and injuries might be avoided, thus preventing some cases of cancer. Inherited tendencies to cancer can be bred out of laboratory animals, such as mice, but this method of control could hardly be applied to men and women.

Scientists trying to find the cure for cancer know they must search further, probing deeper into the life of the cell to learn how it grows and what is needed to make it grow in an orderly, normal way.

Difficult as the problem is, scientists believe it can be solved. Much has already been accomplished in growth control of another kind. Growth of the body as a whole is controlled by the pituitary gland, it is now known. This was learned from the discovery that dwarfs and giants of certain types had diseased pituitary glands. Years of research on this problem led finally to an extract from the gland that helps children with dwarf tendencies to grow.

It is reasonable to hope that the even more difficult step of achieving control of the growth of cells can be accomplished.

"When this day comes we will have the cure for cancer," says Dr. John J. Morton, cancer authority of the Strong Memorial Hospital in Rochester, N. Y.

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