

MEDICINE

Test for Thyroid Trouble

► THE BASIS for better diagnosis and treatment of thyroid deficiencies in infants and children has been established by scientists of the University of California School of Medicine, San Francisco.

In the unique experiments, which are recounted in a recent series of articles in the *American Journal of Diseases of Children*, the scientists used a colony of baby monkeys to establish the tests. The monkeys were housed in a special nursery and given the best modern pediatric care.

Thyroid deficiencies in the past have been very difficult to detect in young infants. If the deficiency remains undetected too long, the child may suffer permanent damage, including mental deficiency and cretinism. If the deficiency is diagnosed early, treatment may give the child a normal life.

The California scientists observed cretin and normal monkeys from the first days of life. They studied the amount of calcium, phosphorus, protein, etc., incorporated into the body at different periods. They made X-rays at regular intervals.

When they got through, the scientists had

a set of criteria which could reveal precise differences in normal and cretin monkey infants at a very early age. Moreover, since monkey and human biology is quite similar, the tests could be adapted for humans.

Through biochemical analyses, radioiodine tests and bone X-rays, in addition to clinical observations, better differentiation can be made between thyroid deficiency and other disorders of growth and development. Thus more precise treatment can be given.

In the United States, the findings are significant primarily in sporadic cretinism, which results from congenital failures in thyroid development. Endemic cretinism, which may occur where there is a natural lack of iodine in the soil, is not as commonly seen in this country.

The scientists conducting the studies included Drs. Donald Pickering, Francis S. Smyth, Delbert A. Fisher, Lee B. Lusted, Jackson T. Crane and Kenneth G. Scott. The baby monkeys were provided by Dr. Gertrude van Wagenen of Yale University Medical School.

Science News Letter, May 22, 1954

ARCHAEOLOGY

Tiny Prehistoric Tools

► TINY STONE tools, so delicate and small that the cutting edge can be studied only by using a powerful hand lens or microscope, were used by prehistoric people of the Arctic to carve on ivory.

These micro-tools were reported for the first time by Dr. J. Louis Giddings Jr. of the University Museum, Philadelphia, at the Society for American Archaeology meeting in Albany, N. Y. They are only an inch long and look something like a phonograph needle, except that they are square instead of round.

The little engraving tools were made, perhaps as much as 10,000 years ago, by flaking them off another small engraving tool known to archaeologists as a "burin," and originally thought peculiar to Stone Age man in Europe. Burins have now been found at various sites around the Arctic Circle from Cape Denbigh, Alaska, to Hudson Bay and Greenland.

With the burins, archaeologists have found literally hundreds of the chips which are called "spalls." Dr. Giddings and his colleagues had assumed that the flakes were chipped off simply to sharpen the burins when they became dull through wear.

Recently it occurred to Dr. Giddings to examine the burins he had collected for evidence of such wear. He found many with no evidence of wear at all. They had evidently been chipped, not to sharpen the burin, but just for the sake of producing the chip.

Although many of the burins had been

used as tools, in a sense they were only an intermediate product in the manufacture of the smaller and more delicate engraving tools.

Dr. Giddings has received confirmation from his colleague, Dr. Larsen Helge of the Danish Museum in Copenhagen, that such tiny engraving tools were also found in Greenland.

Science News Letter, May 22, 1954

• RADIO

Saturday, May 29, 1954, 3:15-3:30 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Dr. George K. Davis, professor of nutrition, University of Florida, will discuss "Research Upon Food."

OCEANOGRAPHY

Underwater Current Near Pacific Equator

► MUSLIN SEA anchors dragged through Pacific Ocean waters near the equator have revealed an eastward underwater current with a speed of over one mile an hour.

This discovery was announced in *Science* (May 7) by Dr. R. B. Montgomery of Brown University, Providence, R. I., and Drs. Townsend Cromwell and E. D. Stroup of the U. S. Fish and Wildlife Service, Honolulu, T. H.

The eastward current is narrow, and flows beneath the westward South Equatorial Current. The newly discovered eastward underwater current is separated from the long-known Equatorial Countercurrent, which also runs eastward, by water that flows in a westerly direction.

Sea anchors used in the survey were cone-shaped devices, made of light muslin attached to an aluminum alloy hoop, weighted at the bottom and bouyed at the top so that it would remain upright. Piano wire joined the deep drags to streamlined floats.

Speed of the sea anchor was found by following the surface float with the Fish and Wildlife's research vessel, Hugh M. Smith, and by radar. The study was sponsored by the Office of Naval Research.

"Equatorial Undercurrent" is the name the three scientists propose for the eastward underwater stream, which runs about 150 feet below the ocean surface.

Science News Letter, May 22, 1954

BARGAIN PARADISES OF THE WORLD

Do you know where to find an island right near the U. S. so nearly like Tahiti in appearance, beauty, and color even the natives say it was made from a rainbow? (And that costs here are so low you cannot only reach it but also stay a while for hardly more than you'd spend at a resort in the U. S.?)

Do you know where to find the world's best mountain hideaways or its most dazzling surf-washed coastal resorts, where even today you can live for a song?

Do you know where it costs less to spend a while, the surroundings are pleasant, and the climate well nigh perfect in such places as Mexico, the West Indies, Peru, France, along the Mediterranean, and in the world's other low cost wonderlands?

Or if you've thought of more distant places, do you know which of the South Sea Islands are as unspoiled today as in Conrad's day? Or which is the one spot world travelers call the most beautiful place on earth, where two can live in sheer luxury, with a retinue of servants, for only \$175 a month?

Bargain Paradises of the World, a big new book with about 100 photos and 4 maps, proves that if you can afford a vacation in the U. S. the rest of the world is closer than you think. Authors Norman D. Ford and William Redgrave, honorary vice presidents of the Globe Trotters Club, show that the American dollar is respected all over the world and buys a lot more than you'd give it credit for.

Yes, if you're planning to retire, this book shows that you can live for months on end in the world's wonderlands for hardly more than you'd spend on a few months at home. Or if you've dreamed of taking time out for a real rest, this book shows how you can afford it.

In any case, when it can cost as little as \$24.50 from the U. S. border to reach some of the world's Bargain Paradises, it's time you learned how much you can do on the money you've got. Send now for **Bargain Paradises of the World** on a money back guarantee if not satisfied. Price \$1.50. Wrap up dollar bill and coins (or send check or money order) and mail with ad and name and address to **HARIAN PUBLICATIONS, 20 SCRANTON AVE., GREENLAWN (LONG ISLAND), NEW YORK.**

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