



PHILATELY

## New Stamps Commemorate Darwin's Galapagos Visit

CHARLES DARWIN, who launched the doctrine of evolution on its world-shaking career, has been commemorated by the government of Ecuador with a special series of stamps, marking the 100th anniversary of his visit to the Galapagos Islands. It was while he was studying the strange animal and plant forms of this isolated group of volcanic islands, directly west of Ecuador and straight south from Panama, that Darwin, then only 26 years old, got the germ of his famous idea, although he did not publish it until many years later.

There are six stamps in the series. The designs are the work of Dr. Wolfgang von Hagen, a well-known scientist to whose active interest the establishment of the unique nature sanctuary by the Ecuadorean Government has been largely due.

One stamp shows Darwin's picture as a bald and bearded old man, and also the British exploring ship *Beagle* on which he sailed. Another is a small map of the archipelago. A third shows one of the giant tortoises that gave the islands their name, and a fourth depicts some of the big sea-going lizards, or iguanas. The fifth stamp, showing a landscape with coconut palms, indicates a change in the plant life of the Galapagos since Darwin's time, for he wrote in his journal, "I saw nowhere any member of the palm family."

The sixth stamp bears a picture of Christopher Columbus.

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PHYSICS

# New Cyclotron Large Enough For Human Radiation

LARGE enough to subject a human being to bombardment by neutrons, a new "atom smasher" or cyclotron is under construction at the University of California's radiation laboratory, where Dr. Ernest O. Lawrence invented this powerful instrument and where he and his associates are continuing its use.

Neutrons are more effective than X-rays in killing animal tumors, it was shown by animal experiments by Dr. John H. Lawrence of Yale School of Medicine, working with his brother at Berkeley. It is therefore possible that medicine is on the verge of applying a new weapon to human cancer.

The electromagnet for the new cyclotron will measure 15 by 20 feet, and weigh over 200 tons. It will be capable of producing 15 million electron volt

energy particles. A small model of the electromagnet is now being tested in the laboratory under the direction of Dr. E. O. Lawrence.

When the cyclotron is finished, it is believed that it will be the largest one in operation. Other large ones are being built at Princeton University, the University of Michigan and at Columbia University.

Since the discovery of the neutron by Dr. James Chadwick in England in 1932, scientists all over the world have been investigating their effects and uses. Cyclotrons are in successful operation at the University of California, the University of Illinois, Rochester University, and other laboratories.

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MEDICINE

# New Treatment May Conquer Troublesome Skin Disease

A PROMISING step toward possible cure of psoriasis, a serious skin disease which has heretofore baffled doctors, was reported to the spectroscopy conference at Cambridge, Mass., by Dr. L. Edward Gaul of New York Post-Graduate Medical School and Hospital, Columbia University.

While his investigation is still in preliminary stages, Dr. Gaul reported that he has been able to effect an almost complete cure in several virulent cases of the disease.

His method is to give his patients a fresh fruit and vegetable diet with occasional rare meat, and periodic injections of carotin, an important constituent of raw carrots noted for its high vitamin A content. This vitamin has been used by doctors in curing other skin afflictions. This method, Dr. Gaul told the conference, was to some extent the result of trial and error procedure.

He had been conducting spectroscopic analysis of living skin tissue in search of lead, gold, silver and other metals which cause such diseases as lead poisoning. In examining the skin of a psoriasis patient to see if metallic poisonings

were possibly involved although blood analyses and other methods failed to detect it, Dr. Gaul's spectroscopy found excessive amount of nickel. Believing that this metal might have been introduced into the system through tinned foods, cooking implements, fat compounds used for cooking or in certain types of prepared foods, he limited the patient to a fresh fruit and vegetable diet with occasional rare meat.

Since vitamin A is known to aid some skin diseases, he injected the patient with it in the form of carotin, the forerunner of vitamin A found in great concentration in raw carrots. He also added a pint of raw carrot juice to the daily diet to give the patient even more of the vitamin. Marked improvement in the psoriatic lesions, he said, were noted within six weeks.

"I do not know if nickel, a deficiency of vitamin A or something else causes psoriasis," Dr. Gaul said. "Our research is still in its preliminary stages and to date we have been concerned only with curing the patients. That we have been able to do with a good degree of success."

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