

## PSYCHOLOGY

# Allow Patients to Talk

➤ A FEATURE of Freud's work that general practitioners are advised to adopt is the method of treatment that allows patients to "talk things out."

This feature of the famous psychiatrist's work would have more permanent significance for the medical profession than his "theory of libidinal determinism," Dr. John C. Whitehorn of Johns Hopkins University School of Medicine, Baltimore, believes. The libido, or sexual desire, is usually considered as predominant in Freud's theories.

Dr. Whitehorn reports in *The New England Journal of Medicine*, 265:301, 1961, that the "whole idea of a conversational method of treatment sounds more like a golf pro correcting a client's slice or hook than a doctor curing a disease."

However, Dr. Whitehorn explains that diseases of "functional origin, that is, states of disability and distress" that arise from the disease-causing aspects of human beings in such states are comparable to the golfer's hook or slice.

In the behavior of the mentally disturbed sick person, he states, one can find evidences of misguided and faulty approach to some life problem. The physician, like the golf pro, who is successful in his approach, does not merely demonstrate the way to do something, but gives professional guidance in showing misdirected effort.

Dr. Whitehorn holds up to physicians in

general an image of man "as a social being," and deplored the tendency of the medical profession to picture society as a "special bogeyman, Socialized Medicine."

The psychiatrist points out the difficulties of many patients in accepting the "leadership of the physician" and says the physician who was most successful in treating patients with mild disturbances were those who avoided being domineering in their conversation, calling out the patient's cooperation and exploring his needs.

Dr. Whitehorn believes his image of man is more nearly true to life than the "physicochemical model or the rather mechanical instinct model that has in recent decades captured medical attention." Combining theory with intuition and common sense is a useful viewpoint, he states.

• Science News Letter, 80:151 September 2, 1961

## TECHNOLOGY

# Sun-Powered Generator

➤ A SUN-POWERED generator, converting solar energy directly into electricity to operate a motor-driven water pump, may raise living standards in underdeveloped areas by providing water for land irrigation and household needs.

## NUTRITION

## Cure for Animal Muscle Deterioration

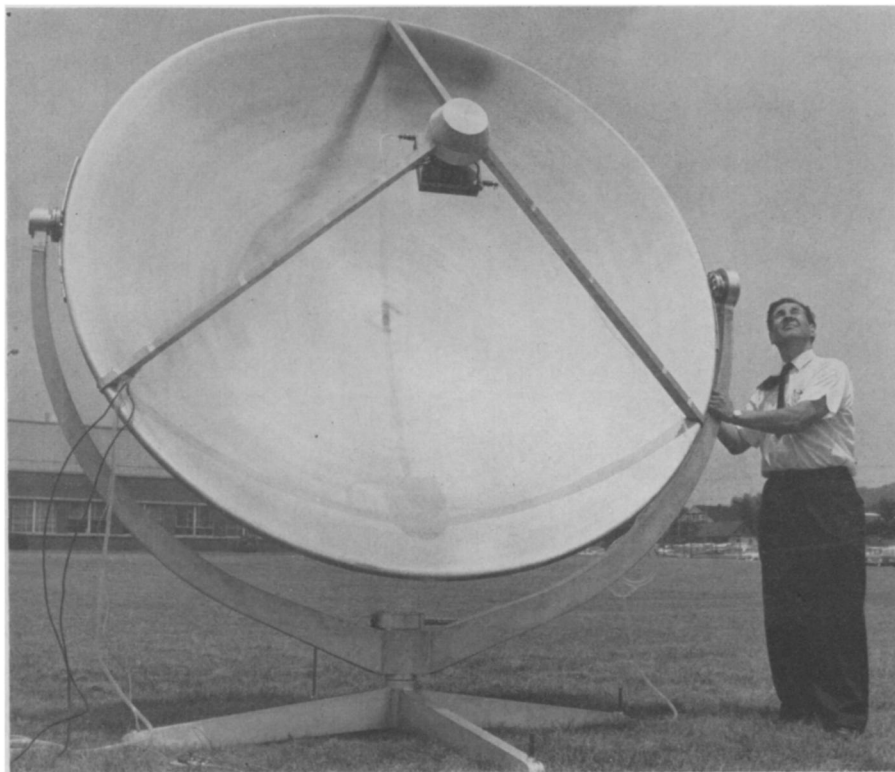
➤ THE QUOKKA, a marsupial resident of Rottnest, an island off the coast of Western Australia, has been subject in captivity to a hitherto fatal deterioration of the muscles.

Dr. Raymond Adams of the Harvard Medical School, Boston, and Dr. ten Seldam of the University of Western Australia, Perth, decided the condition could be due to a dietary deficiency of vitamin E. Nine quokkas were treated with a chemical that duplicates some of the characteristics of vitamin E.

Muscle biopsies performed at intervals of from one to eight weeks showed that eight of the animals had little or no evidence of muscle lesion, depending on the period between biopsies.

Clinical recovery was complete in all nine quokkas in from two to three weeks, Dr. B. A. Kakulas of the University reported in *Nature*, 191:402, 1961.

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**SOLAR POWER PLANT**—A solar-powered thermoelectric system converts the heat of sunlight directly into electricity. Made by Westinghouse Electric Corporation, Pittsburgh, Pa., the unit is proposed as a pumping system to provide water for nonmechanized countries.

A prototype 50-watt power plant and pumping unit has been built and tested by researchers at Westinghouse Electric Corporation, Pittsburgh, Pa., working with scientists from the Solar Energy Laboratory of the University of Wisconsin.

A saucer-shaped mirror focuses sunlight on the small, box-shaped generator, which has one side painted black to absorb solar heat at high rates. Inside the box are 72 thermoelectric couples that generate electricity when the black side is heated to a higher temperature than the other side.

The hot side of the generator runs at an operating temperature of 840 degrees Fahrenheit and the cool side at 150 degrees Fahrenheit. The motor and the pump are the only moving parts in the experimental irrigation system.

A larger unit, able to deliver up to 200 watts of power, is being built. This model is expected to be able to pump enough water from a 20-foot depth to irrigate four acres of land, at the rate of 24 inches of water annually, or supply the personal needs of 1,200 persons, each using five gallons daily.

For this amount of water, the 200-watt system would operate ten hours daily for 250 days of the year, leaving a one-third safety margin for cloudy weather when the generator could not operate.

Two-thirds of the world's people live in areas that have sunshine at least 75% of the time, Dr. S. W. Herwald, vice president of the Westinghouse research section, noted.

Kurt Katz, senior engineer at the Westinghouse new products laboratories, reported on the thermoelectric generator at the United Nations Conference on New Sources of Energy, which opened Aug. 21 in Rome, Italy.

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