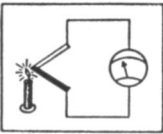


THERMO-ELECTRONICS

Successor to thermo-electricity. Change heat to electricity DIRECTLY—no acids, liquids, chemicals, moving parts or sunlight! Build or buy a thermo-electronic battery. Mail 25¢ today for information and sample thermo-electronic alloy.



HERMON E. COTTER Dept. H, 15766 Blackstone, Detroit 23, Mich.

MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).

SNL, 1719 N St., N.W., Washington 6, D. C.

BOOKS

BOOKS 10¢—ALL SUBJECTS—CATALOG 10¢. Cosmic, Clayton 2-2, Ga.

MISCELLANEOUS

BINDERS FOR SALE—BUFF-COLORED BUCKRAM Snap-in metal strips hold 52 copies. \$4.00 pp. Send orders with remittance to Science News Letter, 1719 N Street, N.W., Washington 6, D. C.

MICROSLIDES

MICROSLIDES: INSECTS, MARINE LIFE, ZOOLOGICAL, Botanical, British Fresh Water Algae Free. Send for Complete list Free. Esbe Laboratory Supplies, 459 Bloor St., W., Toronto, Ontario, Canada.

PRECISION GEARS

SMALL PRECISION GEARS MADE FOR INDUSTRY, Science & development. William A. Phelps, Manufacturing Horologist, 4106 1/2 Glenway Avenue, Cincinnati 5, Ohio.

Get **UNITRON's** FREE

Observer's Guide and Catalog on

ASTRONOMICAL TELESCOPES

This valuable 38-page book is yours for the asking!

With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

Contents include—

- Observing the sun, moon, planets and wonders of the sky
- Constellation map
- Hints for observers
- Glossary of telescope terms
- How to choose a telescope
- Amateur clubs and research programs



UNITRON

INSTRUMENT DIVISION of UNITED SCIENTIFIC CO.
204-206 MILK STREET • BOSTON 9, MASS.

Please rush to me, free of charge, UNITRON'S new Observer's Guide & Telescope Catalog 5R-3

Name
Street
City State.....

PSYCHIATRY

Study Dreams of Deaf

THE DREAMS of persons who were born deaf are particularly vivid, in color and three dimensional, and frequent. Even their daydreams are often so vivid as to distract them from what is going on in the real world.

For the most part, they use the sign language in their dreams and do not try to communicate by nonverbal means such as posture, gestures, and so on.

In anxiety dreams, however, these deaf persons mainly rely on childhood "home-made" signs used by parents before the children learned the conventional sign language.

The dreams of those with acquired deafness were different. Especially those who became deaf late have dreams that lack color, vividness and sign language.

This information about the dreams of the deaf was gathered by Drs. Jack H. Mendelson and Philip Solomon of Harvard Medical School and Dr. Leonard Siger of Gallaudet College, Washington, D. C. The data were obtained from psychiatric interviews with 26 totally deaf students at Gallaudet, the national college for the deaf. All the students were very proficient in the sign language.

The dreams of the congenitally deaf, they reported to the American Psychiatric Association meeting in Philadelphia, are similar to the fantasies of subjects in experiments of isolation and sensory deprivation who experience a free flow of vivid imagery.

Father's Effect on Child

"TELL ME what kind of father a mental patient has and I will tell you what kind of illness he suffers. And this is true in Burma, just as it is in Boston."

This effect of family relationships on the personality of the child was reported to the Psychiatric Association by Dr. Daniel H. Funkenstein of Harvard Medical School and Miss Hazel M. Hitson of the Massachusetts Mental Health Center.

If the father is a harsh and critical dictator, always telling the child what to do and what not to do, the child will develop a paranoid type of personality, suspicious, aggressive, always throwing the blame on others and "taking it out" on someone else. If he becomes mentally ill, he will most likely become a paranoid.

If the father is just the opposite, putting responsibility on the child to do what is "right" and punishing him because he "ought to have known better," then the child will grow up to be constantly blaming himself when things go wrong. If he becomes mentally ill, he will be depressed. You might expect children of dictators to be the kind that commit murder; the child who is held responsible for doing right is most likely to grow up to commit suicide.

Study of an all-Burmese, all-Buddhist village in Lower Burma shows that family structure in Burma is "remarkably similar"

to that of paranoid patients in Boston, the report stated.

Mental illness in Burma includes a wide range of paranoid disorders while depressions are rare.

Burma has the second highest homicide rate in the world.

Science News Letter, June 20, 1959

MEDICINE

Degeneration of Muscles In Non-Muscular Diseases

A LARGE number of non-muscular diseases may produce muscle degeneration, a three-year study at the University of California Medical School, Los Angeles, has shown.

The study was made by Dr. Carl M. Pearson who obtained tissue at autopsy from 130 persons who died from a wide variety of non-muscular diseases.

A significant number of varied and distinct pathologic changes in muscle was found in nearly one-half of the cases, he said. Degeneration of muscle was found most frequently in persons with malignancy or diseases of the connective tissue, but was present in many disorders.

Inactivity resulting from confinement of patients may contribute to some of the muscle changes, he noted. Nutritional problems, such as those associated with cancer, may also contribute.

Evidence of muscle regeneration, found in the study, suggests that muscle degeneration and repair may be a continuous process even in healthy individuals. Excess of the former over the latter possibly contributes to the muscle weakness and wasting which are characteristic of the chronic disease state, he said.

The UCLA physician said that on the basis of these studies, muscle biopsy is still a fairly reliable diagnostic procedure, "but diagnostic interpretations made from it should be made with caution."

Science News Letter, June 20, 1959

Questions

BIOCHEMISTRY—What significance is seen in the fact that obese animals retain steroids? p. 388.

GEOLOGY—How long ago were Siberia and Alaska joined by land? p. 392.

MEDICINE—What chemical placed on the heart muscle can remedy electrical imbalance of this muscle? p. 387.

Photographs: Cover and p. 389, General Electric Company; p. 387, American Medical Association; p. 390, Convair Division of General Dynamics Corporation; p. 391, Boeing Airplane Company; p. 400, Eastman Chemical Products, Inc.