

PSYCHOLOGY

Trance Mediums Take Personality Tests

EFFORTS are being made in England to give psychology tests to those elusive personalities that emerge when psychic mediums go into trance states.

While three well-known mediums agreed to take the first tests, the actual testing procedure turned out to be far from a routine, clock-work affair.

Results of these tests have been reported to the Society for Psychical Research by Whately Carington. He stated that one woman medium had such erratic electric resistance of her skin that the galvanometer, used to measure "excitement" in psychology tests, failed to produce a record that could be interpreted. Another subject, a man, did not fully cooperate.

Mr. Carington aimed to compare the personalities of the mediums in normal state and in trance by noting their associations with test words and by observing which words and ideas caused excitement.

In two of the mediums, he reported that the normal personalities and the trance personalities were significantly different. In one case, that of Rudi Schneider and his trance personality called Olga, he found the similarities more remarkable than the differences.

Science News Letter, September 29, 1934

PHYSIOLOGY

Girl Was a Mother At Age of Seven Years

THE eleven-year-old Tennessee girl who is reported to have borne a child is not the youngest mother on record. The world's record is probably held by a little Mohammedan girl of Delhi, India, who gave birth to a fully developed child at the age of seven.

This child, according to the report of the case made by Dr. Hilda L. Keane of the Victoria Znanina Hospital, Delhi, to the *British Medical Journal*, was brought to the hospital suffering from an abdominal tumor. Her father said the girl was seven years old and this proved, on checking with the health authorities and the municipal record of her birth, to be her correct age.

Examination showed that she was not suffering from a tumor but was about to become a mother. A Caesarean operation was performed and a living baby girl, weighing four pounds and three

ounces, was born. The baby was not premature, Dr. Keane stated. The little mother suffered from fright during the first three days after the birth of her daughter, but otherwise recovered perfectly and was able to nurse her child for nine months. At the end of this period the baby weighed a little over eleven pounds.

In India cases of girls becoming mothers at the age of ten are not uncommon, medical authorities state. In warm climates generally both boys and girls mature at an early age. Most cases of early motherhood occur in girls who are well developed physically and have matured sexually far beyond the normal for their chronological age. But the young Mohammedan mother apparently was still a little girl in development and size. She was three feet eleven inches tall at the time her child was born and weighed 48 pounds. She still had almost all of her milk or baby teeth.

Science News Letter, September 29, 1934

PUBLIC HEALTH

Alcoholism Deaths Rise Slightly Since Repeal

DEATH rates due to alcoholism since repeal have decreased slightly among white Metropolitan industrial policyholders, but increased slightly among the colored.

Although alcoholism is a minor cause of death, both among the insured and the general population, the first half year of the Metropolitan Life Insurance Company statistics since the end of the prohibition era show that this year the rate among the colored policyholders was double that of the corresponding first six months of last year, 4.9 deaths per 100,000 compared with 2.4 per 100,000. Corresponding rates for whites dropped from 2.2 in 1933 to 2.0 in 1934. The combined figures showed a slight rise from 2.2 in 1933 to 2.3 in 1934.

New low death rates for tuberculosis, diphtheria and diseases of pregnancy and childbirth for 1934 are expected by Metropolitan statisticians on the basis of the first half year's record.

The outstanding unfavorable development in 1934's health picture is an abrupt rise of 15 per cent. in the pneumonia death rate. Measles is double last year's rate and whooping cough nearly double, but these increases are not particularly significant because the rates are still extremely low.

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IN SCIEN

FORESTRY

Trees' Consent Needed For Successful Forestry

FORESTERS must consult something besides their own desires and the tastes of the ultimate timber consumer, if their cultivated forests are to be successes. They must admit the trees themselves to their councils.

If trees are thrust into soil not suitable for their roots, or subjected to climates to which they are not adapted, they will take revenge upon the foresters by not being profitable.

Points to be heeded by the careful forester were indicated before the meeting of the botanical section of the British Association for the Advancement of Science, by its president, Prof. A. W. Borthwick, of the University of Aberdeen.

Prof. Borthwick does not expect results from efforts to grow trees in even-rowed "pure stands."

"When man interferes too much with nature," he said, "she inevitably replies by countering his efforts, unless they comply within certain limits to natural laws. The endeavour to grow pure forests of trees on wide areas, in dense, uniform, even-aged masses, irrespective of changes in soil conditions and climate, is not in accordance with natural laws."

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ORNITHOLOGY

Eagle's Flight Timed At 120 Miles An Hour

"SWIFT as an eagle in its flight" means about 120 miles an hour.

That, at least, was the speed attained by a golden eagle observed in the Scottish mountains by Dr. F. Frazer Darling, who had an opportunity to time the bird over a three and one-half mile course. At the same time the eagle made an altitude gain of a thousand feet.

Dr. Darling has reported the details of his observation to *Nature*.

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CE FIELDS

PUBLIC HEALTH

Tonsil Removal Assures Pure Milk

REMOVAL of tonsils has been found a successful means of solving the problem of carriers of the dangerous streptococcus organism among workers in dairies, Dr. C. W. Bonyng of the Milk Commission of the Los Angeles County Medical Association reported before the meeting of the American Public Health Association at Pasadena.

Epidemics of septic sore throat have been traced to milk infected by dairy workers who carried the organism of the disease although they were not themselves ill.

Discharging the employees found to be carriers is not a practical method of handling this important public health problem, Dr. Bonyng pointed out, because they are apt to find new employment in other dairies that are not carefully inspected and certified.

Removal of tonsils cleared up the carrier condition among employees of dairies certified by the Los Angeles Milk Commission, Dr. Bonyng said. After the operation the carrier no longer harbors the streptococcus organism and can continue in his work at the dairy with entire safety to the public drinking the milk he handles. In some cases, the organism persisted in the patient's throat after operation, but this was found to be due to incomplete removal of the tonsils, or to the fact that other tissues in the throat were infected.

Science News Letter, September 29, 1934

CHEMISTRY

Versatile Chemical Plays Seven Roles

ONE of the strangest Jekyll-and-Hyde roles among the atoms was reported before the meeting of the American Chemical Society by Dr. Walter H. Hartung of the Sharp and Dohme Chemical Company of Philadelphia.

The multi-faced substance is known chemically as propiophenone. Chemists

know accurately its composition, or atomic "skeleton." It is a chemical having a pleasing odor that lends itself to blended perfumes. But by changing the kind of atom "flesh" through chemical manipulation, scientists are able to produce thirteen different compounds, all active physiologically and representing seven different types of activity.

From propiophenone it is possible to build up two kinds of local anesthetics, a flavor suggesting licorice, a germicide eight times as powerful as carbolic acid, a chemical causing crying, and the stimulant ephedrine.

Propiophenone rivals other organic chemicals reported which, while having the same basic atom skeleton, are found in such widely different things as cholesterol, vitamin D, the bile acids, the sex hormones and cancer-producing coal tar products.

"While there is abundant evidence of relationship between physiological action and chemical constitution," declared Dr. Hartung, "our knowledge thereof is yet so elemental that we can not even yet vault the low hurdle raised by the chemical family descended from a simple substance like propiophenone."

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CHEMISTRY

Poison Ivy's Poison Same as That in Lacquer

POISON IVY and the plant that produces Japanese lacquer have the same toxic substance in them, Prof. G. Albert Hill of Wesleyan University, Middletown, Conn., told the American Chemical Society at its meeting in Cleveland.

Prof. Hill was able, after a long series of chemical manipulations, to isolate from the bark of the poison ivy plant the substance known as urushiol, first obtained by the Japanese chemist Majima from Japanese lac. Lac, the raw material for the familiar Japanese lacquer, is obtained from a tree belonging to the sumac family, of which poison ivy is also a member. During the mah jong craze a few years ago, numerous cases of lacquer poisoning were traced to game sets imported from the Orient.

Before he succeeded in extracting urushiol from poison ivy bark, Prof. Hill had tried to get it out of the leaves, but without success. He used up a total of 800 pounds of poison ivy leaves in his first experiments.

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ZOOLOGY

To "Standardize" Animals for Research

SCIENTISTS of the future, experimenting with anthropoid apes, may have their laboratory material standardized just as chemists do today. This is the prophecy made by Dr. Robert M. Yerkes of the Yale Laboratories of Comparative Psychobiology.

It will require years to achieve this ideal, Dr. Yerkes warned, but ultimately the investigator who wishes to study the behavior or physiological reactions of these man-like creatures may select a subject accompanied by a pedigree, life-history, and characterization. This is one of the primary objectives of the breeding colony maintained by Yale under the direction of Dr. Yerkes.

On May 1, 1934, the breeding colony consisted of three mature male chimpanzees, twelve mature females, four children, and ten infants under three years. Between May 14, 1933, and May 2, 1934, eight normal births occurred at the Station.

"Chemists habitually safeguard their results by using only chemically pure materials, whereas biologists commonly accept their subjects as accidentally or incidentally found," Dr. Yerkes said. "Many indeed are the risks and disadvantages of using, in an important inquiry, animals whose age or developmental status, sexual condition, disease history, or experience are unknown. Yet this is precisely the situation with respect to the prevalent use of infrahuman primates—not to mention other mammals—in our laboratories today."

Science News Letter, September 29, 1934

METEOROLOGY

Philippines Almost Got Japanese Typhoon

JAPAN'S disaster came very close to being the woe of the Philippines instead, scientists of the U. S. Weather Bureau informed Science Service.

Tracing reports of the moving center of the big storm, the meteorologists found that it originated over the open ocean southwest of the island of Guam. It moved toward the Philippines, but just before making land it suddenly veered, first north-northwest, then north-northeast, finally to bear its cargo of death and disaster to Japan.

Science News Letter, September 29, 1934