

PSYCHIATRY

Freud Says Moses May Not Have Been a Jew

Moses, great leader of the Jewish people, was himself probably not a Jew. This suggestion comes from Prof. Sigmund Freud, Jewish exile from Vienna where he founded psychoanalysis and now in London.

Evidence from language study that the name Moses is not Hebraic but Egyptian in origin is cited by Prof. Freud in raising the question of whether the Jewish hero was not actually an Egyptian. He adds evidence from a study of various birth-adoption legends which indicates that in these stories the first family—the one from which the hero is cast forth—is always the fictitious one. The second or foster family in the story is always the real one in fact.

That such evidence will generally be considered as conclusive, Prof. Freud regards as unlikely, however.

Prof. Freud's scientific paper, originally published in the *International Journal of Psycho-Analysis* is abstracted in *Psychiatry*, (August).

Science News Letter, December 3, 1938

PUBLIC HEALTH

Making Christmas A Safe and Sane One

Health authorities have taken to urging that Christmas as well as the Fourth of July be made safe and sane. Dangers particularly stressed are lighted candles on Christmas trees, which have caused many disastrous fires, and toys that may seriously injure children, especially very small children.

To show how dangerous some of the toys given to children as Christmas gifts may be, Dr. Huntington Williams, Baltimore's Commissioner of Health, tells a story about an air rifle given to a little six-year-old boy. The child put a nail into his air rifle, shot it off and killed a little friend, for the nail went into the second little boy's ear.

These very air rifles, ordinarily considered quite harmless, are said, when put in the hands of youngsters, to cause more blindness and injuries to children than all the whole category of high-powered hunting rifles.

One of the things to consider in buying toys for children, at Christmas or any other season, is the age of the child for whom the gift is intended. Few persons would be so careless as to give knives, matches or scissors to babies or

toddlers. Yet many persons forget that a child must be old enough to have a sense of responsibility and caution before he can be safely given such playthings as tool sets, chemical sets and toy cookstoves.

Dr. Williams related the case of a four-year-old girl whose dress was set on fire by a toy electric cookstove with the result that she was burned to death, and another case of a little girl also fatally burned when her small brother tossed a match into a pan of alcohol that was part of a chemical set the children had just received.

Toy balloons may be dangerous if they are filled with hydrogen, which is a highly inflammable gas.

Even such a harmless thing as a celluloid duck can cause tragedy, as shown by the case of a 14-months-old baby who was badly burned when he pushed such a toy into a gas heater near him.

Science News Letter, December 3, 1938

ENGINEERING

Wax "Beauty Pack" Takes Feathers From Turkeys

AMERICA's holiday turkeys, more of them this year than ever before, will come to the table cleaned by a novel and efficient waxing and de-feathering method. The method is one of applied science's most important recent gifts to the poultry industry.

As many as 300 cleaned turkeys can be turned out in an hour, ready for oven or skillet, by the new method. In one installation it takes each bird 53 minutes to go through the entire stripping process, but with him go hundreds of other birds.

The process starts with the suspension of the bird by his feet from a conveyor. As the bird starts through the "mill," tail and wing feathers and some of the larger body feathers are removed by hand.

Next the bird enters a drying tunnel until the remaining feathers are entirely dry. The bird is then mechanically dipped into wax vats. The belt then carries the future dinner into a tunnel where cold water is sprayed on the wax coating to harden it. Employees then strip off the wax, which carries with it the feathers. Inspection to guarantee that pin feathers have been removed is followed by singeing.

The wax used is reclaimed by heating and run through a rotating apparatus that separates wax and feathers by centrifugal force.

Science News Letter, December 3, 1938

IN SCIENCE

CHEMISTRY

First Vitamin Discoverer Given Belated Recognition

CREDIT for the first discovery of a vitamin is given nearly 40 years after the discovery, to the true discoverer of bios, Professor Emeritus Manille Ide, of the University of Louvain, Belgium. The fact that it was Prof. Ide and not his assistant, Dr. E. Wildiers, who actually discovered this substance, is reported by Dr. Roger J. Williams, of Oregon State College. (*Science*, Nov. 18)

Bios is the substance that is responsible for stimulating growth of yeast, as the more familiar alphabetized vitamins stimulate growth in man and other animals.

Dr. Wildiers, generally credited with discovering bios, was, according to Dr. Williams who investigated the matter while in Europe last summer, "an immature undergraduate medical student of comparatively mediocre attainments at the University of Louvain" who helped Dr. Ide with the research leading to discovery of bios. Dr. Wildiers, who never did any more research after finishing medical school, got credit for the discovery because Dr. Ide permitted him to use the results of the research in a competition thesis on which Wildiers' name, but not Ide's appeared. Dr. Wildiers is now dead.

Science News Letter, December 3, 1938

ZOOLOGY

Cat Has Internal Organs All "Wrong Side To"

ATOTALLY reversed cat, with all its internal organs "wrong side in," was found in a lot of dead tabbies purchased for laboratory study at the Pennsylvania College for Women. Lungs, kidneys, veins and arteries and all parts of the digestive tract were normal in size and shape but so situated that descriptions for the left side fitted right perfectly and vice versa.

Miss Helen A. Wragg, who reports (*Science*, Nov. 18) the "mirror-image" cat, suggests that the animal may have been one of a pair of identical twins.

Science News Letter, December 3, 1938

FIELDS

POPULATION

Large Proportion of Aged Among Jewish Refugees

COMPLICATING the problem of re-colonizing the Jewish refugees from Germany is the fact that unusually large numbers of them are old people for whom adaptation to new ways of life will be extremely difficult, it is pointed out by Dr. Christopher Tietze, population expert of Johns Hopkins University's School of Hygiene and Public Health.

This group has a larger proportion of old people than has the general population, and there are also disproportionate numbers of city dwellers and small shop keepers, Dr. Tietze says.

The typical member of the group has little education and no familiarity with foreign languages.

These old people, used to city ways and keeping a small shop, would be most unlikely to adapt to life in an agricultural community in a foreign land and under completely new climatic conditions.

To expect it would be "like believing that you could successfully dig a ditch with a microscope," Dr. Tietze said.

Science News Letter, December 3, 1938

MEDICINE

Mosquito Seen as Carrier of "Sleeping Sickness"

MOSQUITOES are under heavy suspicion as being the agents that spread "sleeping sickness" of the type known as St. Louis encephalitis which was epidemic in 1937 and 1933.

A new study, reported by Drs. A. E. Casey and G. O. Broun of St. Louis University (*Science*, Nov. 11) seems to confirm previously held suspicions of the role of the mosquito in spreading this disease.

Almost all "sleeping sickness" cases in the St. Louis area, the doctors have found by new map studies, occurred within a mile or one-half mile of streams where weeds, garbage and tin can dumps, open sewage and ponds are found. All of these conditions provide good breeding grounds for mosquitoes.

Areas more than one mile from such regions were very slightly affected by the encephalitis epidemics.

Making the mosquito carrier case even stronger, the St. Louis doctors point out that the same areas of the city were involved in both epidemics and that in both epidemics the predominance of the cases was in those areas in which the disease first appeared.

"Every known feature of its epidemiology," they state, "is common to the mosquito-borne diseases, such as yellow fever, malaria, and equine encephalomyelitis."

This last is the horse equivalent of "sleeping sickness" which has been recently discovered to afflict humans and is known to be carried from horse to horse by mosquitoes.

The disease does not seem to be spread by milk, water or food, nor are congested housing, prevalence in cold season, and multiple cases in the same family or household features in this ailment that could account for its spread, as they do for other diseases.

Science News Letter, December 3, 1938

ENTOMOLOGY

Two New Devices Aid in War Against Plant Enemies

TWO new devices developed at Rutgers University are proving effective in the endless war that man must wage against the insects and other enemies of the plants he grows.

One is an electric soil pasteurizer, invented by Prof. W. C. Krueger of the New Jersey College of Agriculture. Built somewhat after the manner of an old-fashioned hand printing press, it thrusts wedge-shaped metal strips into the soil in the shallow boxes, or "flats," in which greenhouse men start their tender plants. The current generates heat, which effectively rids the soil of micro-organisms, insects, parasitic worms, weed seeds and all other harmful life forms. A six to eight minute treatment suffices.

The second apparatus, known for convenience as the "hot box," is intended to rid flowering plants of a particularly troublesome creeping pest, the cyclamen mite. It is simply a solidly built chamber with a tight door, in which the temperature can be raised to a point where the mites are killed, though the plants remain uninjured. The "hot box" is the invention of Dr. Clyde C. Hamilton of the New Jersey Agricultural Experiment Station.

Science News Letter, December 3, 1938

GEOPHYSICS

Pull of Sun and Moon Seen As Trigger for Quakes

NEW evidence that earthquakes are set off by the pull of the sun and moon on the earth, and also by changes in barometric pressure, is offered by Dr. C. D. Perrine of the National Observatory, Cordoba, Spain (*Nature*). He states that prediction of heavy destructive shocks within two or three days can be made by applying his results.

These gravitational pulls from outside the earth do not actually cause the earthquakes, according to Dr. Perrine's interpretation. The rocks are put under a condition of extreme strain, just short of the breaking point, by the earth's own internal forces. Then the outside pulls, or the change in air pressure, relatively slight though they may be, serve as last straws that break the geological camel's back.

Dr. Perrine has made statistical studies of series of great earthquakes, and finds that "approximately 80 per cent. showed preference for times of new and full moon," when sun and moon are exercising their gravitational pulls upon the earth along approximately the same straight line.

Science News Letter, December 3, 1938

AERONAUTICS

Government Man Patents Automatic Landing System

AN automatic system for landing air-planes has been patented by Francis W. Dunmore, National Bureau of Standards scientist.

Including an automatic air speed control, the device, covered by Patent No. 2,133,285, controls the glide of the plane down the radio beams that guide the craft to the airport runway.

Provision is made for the control device to take control of the plane automatically when the radio picks up the runway localizer radio beam at a distance of six or seven miles from the airport. The plane's control surfaces are automatically set in the gliding position and the craft glides in at a controlled speed.

The difference between this and other blind landing systems is that this substitutes an automatic control hook-up between landing beam receiver and the plane's controls for the instruments that tell the pilot whether he is on or off course. The patent is assigned to the government.

Science News Letter, December 3, 1938