

PSYCHIATRY

Mental Depressions

► UNCONSCIOUS MEMORIES of coming out second best in childhood rivalry with other children, including the Christ Child, bring on attacks of mental depression in adults at Christmas time.

This explanation for "Christmas neurosis" was given by Dr. L. Bryce Boyer of Berkeley, Calif., at the meeting of the American Psychoanalytic Association in New York.

"Throughout Christian lands," he reported, "depressions are frequently associated with Christmas."

Findings in a study of 17 patients treated with psychotherapy or psychoanalysis and who suffered from signs of depression, or melancholy, at the usually joyous Yuletide showed Dr. Boyer the reason for the Christmas neurosis.

Psychoanalysis, he pointed out, has determined that depressions occur in people who have suffered a lack of emotional nourishment during the early infantile period of their lives.

A particular mark of depression is a loss of self-esteem.

All of the 17 patients Dr. Boyer studied had suffered emotional deprivations during their early childhood. All had fared second best, or felt they had, in rivalry with brothers and sisters for affection and attention from the parents.

At Christmas, these patients had made Santa Claus equal, in the their own minds,

with parents who gave presents. The presents were tokens of love but at the babyhood level love tokens are feedings that satisfy hunger.

"Thus, at least in America, Christmas-time was seen to be associated with a revival of old memories, unconscious to be sure, related to the infantile period of dependency for satisfactions of hunger needs," Dr. Boyer said.

"It is to be remembered that Christmas is a holiday which celebrates the birth of Christ. The majority of these patients unconsciously perceived Him to be a personal rival.

"Jesus is the incomparable child whom all members of Christendom revere. No child could satisfactorily compete with such a foe for favoritism. Hence the fact that Christmas is a celebration for Christ, reminded the patients again of unresolved rivalries with siblings, real or imaginary, in their distant pasts.

"The result of the reawakened conflicts was a loss of self-esteem based on a remembrance of love they felt they did not receive, and, according to infantile logic, did not deserve, and their feelings they could not compete with Christ as at an earlier time they could not succeed in their struggles for favoritism against their sibling rival or rivals.

"The resulting reaction was depressive."

Science News Letter, December 18, 1954



BETTER IRRIGATION—The distribution of irrigation water, made radioactive by rubidium, is measured along the cane line by James Silva of the Hawaiian Sugar Planters' Association's Experiment Station.

ENTOMOLOGY

Cities' Fly Problem May Be Eliminated

► THE COMMON fly's weakness for something sweet to eat may mean that it can be substantially eliminated from plaguing city-dwellers.

A year's study of the effects insecticide-sweetened baits have had on the fly population of cities was reported to the meeting of the Entomological Society of America in Houston, Tex., by J. C. Keller of the U. S. Department of Agriculture's research service.

Using insecticides made from organic phosphate compounds, diluted in mixtures of molasses, malt or sugar and water, the baits reduced the fly population at a rendering plant 99% in four hours. At a city dump, the scientist reported, control of houseflies and blow-flies ranged between 97% and 99% 24 hours after treatment.

It was also reported that on garbage and trash piles in a city slum area, daily treatment provided progressively better control until, at the end of five days, the fly population had been reduced 90% or more.

Two of the chemicals, malathion and L 13/59, had proved effective before in controlling insecticide-resistant flies on farms, but the tests also included many new materials, such as chlorthion and an experimental phosphate, OS-2046.

Mr. Keller added that results varied depending upon where baits were used and the species of the flies. The research on ridding cities of the fly problem by using baits was done by Mr. Keller, Dr. Carroll N. Smith and H. G. Wilson.

Science News Letter, December 18, 1954

AGRICULTURE

Fight Soil Erosion

► WIND TUNNEL tests are helping farmers defend their land and their homes against wind damage.

At a "war college" in Manhattan, Kans., scientists are learning a great deal about how much protection different kinds of barriers give from the wind tunnel experiments. They set up a toy-size farmhouse and tiny trees, fences and fields in the tube in various ways, then subject them to wind-machine attacks ranging from a breeze to a gale.

Sawdust snowstorms can be whipped up. Sieved gravel simulates the kind of surface that wind is likely to encounter when it strikes the soil. Wind on the rampage not only carries off top soil, but also robs soil of moisture, piles snow in drifts and works havoc with farmhouse heating.

The wind tunnel data indicate the effects of full-scale barriers under natural conditions if proper modeling techniques are followed, N. P. Woodruff of the U. S. Department of Agriculture reports in *Agricultural Research* (Dec.).

Primary strategy in placing a barrier is to slow down wind and absorb some of its force, just as mountains, forests and other

natural objects do on a grand scale. A man-made barrier affects wind in the same way. It diverts currents of air upward, and causes a drag on the wind at approximately the same height as the barrier.

This lessens the drag on ground surfaces, lowers the prevailing surface wind speed, and creates a pool of relatively calm air within the zone of influence of the obstacle.

From the Kansas experiments, Mr. Woodruff reported, scientists have learned, among other facts, the following:

A single snow fence brakes wind velocity "considerably" to distances of four to ten times the height of the fence.

Four snow fences spaced at distances 12 times fence height catch about two and a half times as much snow as one fence, and four times as much snow as a solid wall.

A well designed shelterbelt of trees and shrubs is likely to catch more than three and a half times as much snow as the best arrangement of snow fences.

A ten-row shelterbelt near a house can cut fuel use "considerably" in a windy winter. Percentage saving on heat dwindles the farther the barrier is from the house.

Science News Letter, December 18, 1954