PSYCHIATRY

Brandy "Shot" Brings Mental Patients Out of Stupor

ALCOHOL can bring men out of a stupor as well as drive them into one. Brandy can do the trick if given in real "shots"—by hypodermic injection.

Men lying in the death-like stupor of the mental disease schizophrenia have broken a silence of months as a result of getting mildly intoxicated on brandy, it is revealed by Drs. N. V. Kantorovich and S. K. Constantinovich, of the Medical Institute and Psychiatric Hospital, Leningrad, in making a preliminary report of their experiments to the American Psychiatric Association.

The brandy was given by hypodermic because patients in this condition could not be made to swallow the liquid. The results promise a new method of treatment for these inaccessible sufferers walled in by a barrier of silence.

"M," a young musician only 21 years old, had been ill for a month. He could not answer a single question put to him by the physicians or hospital attendants. He just grimaced, shrieked, or muttered unintelligibly.

A few minutes after receiving the brandy, this patient quieted down and answered the physician's questions readily. Later he was able to write a coherent letter to his mother. In a couple of weeks he appeared to be entirely recovered.

Another young man had not spoken a word for over six months and had been ill for two years. He lay rigid with a mask-like expression on his face.

A few minutes after he received the brandy, he smiled and asked for a cigarette. Five minutes later he began to talk, and told the physicians the whole story of what lay behind his illness. He said that he had lain silent for months because he was afraid that if he attracted any attention his enemies would kill him.

After his "jag" wore off, he returned to his mute condition, but he has been noticeably improved, even able to do some work in the shop.

The physicians tried this method on 15 patients. Four were markedly improved. In seven other cases, the improvement seemed to last only while they were under the influence of the alcohol, but was considered worthwhile since it gave physicians some contact with them and clues about their mental state. In four cases, the alcohol seemed to produce no considerable change.

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PSYCHOLOGY

Scientific Study of Human Wants and Values Is Urged

HUNGER and thirst and the need for protection against cold and storm may be primary needs in man, but they are only of minor importance in the American's budget, scientists gathered at the meeting of the American Association for the Advancement of Science learned from the address of their retiring president, Dr. Edward L. Thorndike, psychologist of Teachers College, Columbia University.

In a good year, Americans spend 17 billions of dollars on food, but only a little more than half that amount to satisfy hunger. Another 8 billions goes for clothing, but only 41 per cent. of that for actual protection against cold, heat and wet.

Of the 700 millions spent on cosmetics and beauty parlors, one-seventh is for the pleasures of sight and smell, one-fourth for the pleasures of sex and courtship, one-third to gain general approval from others, one-eighth to have inner self-approval, and about one-tenth to secure mastery or domination. Dr. Thorndike urged his fellow scientists to include in their research an appraisal of human wants and satisfactions.

Determining what is of value to civilization should not be left to the philosopher, the sage, or the moralist; such determinations are amenable to scientific methods, Dr. Thorndike said.

All men should not be considered equal when these values are determined scientifically, he indicated. The wants of the men of 1950 should be given more importance than the same wants in the men of 2050.

The wants of intelligent men should be given more weight than the same wants of dull men; the wants of good men more than those of bad men.

An analysis by psychologists of the spending of Americans was quoted by Dr. Thorndike as revealing the real wants of human beings today.

Budget of Wants

"When the entire annual budget is transformed item by item into a budget for the satisfaction of human wants, payments for sensory pleasures, security, approval of others, and the pleasures of companionship and sociability, including romance and courtship, are in each case close in magnitude to the amount paid for freedom from hunger," he said. "In fact, we pay more to maintain self-respect and the good opinion of others and avoid scorn, derision and shame than to keep our bodies fed and free from the distress of hunger.

"We pay more for entertainment, including the intellectual pleasures and the sensory pleasures of sight, sound, taste and smell, than for protection against cold, heat, wet, animals, disease, criminals and other bad people, and pain.

"Less than one-third of what we spent went for wants which must be satisfied to keep the human species alive and self-perpetuating. The rest went chiefly to keep us amused and comfortable physically, intellectually, normally, and especially socially.

"Relatively little is paid for the satisfactions of the intellectual life. The psychologists consider that the payments for private schools, books, and magazines are often for prestige, power and other practical satisfaction, and do not credit the theatres and movies of 1929 with much intellectual appeal."

Can Improve Desires

Man can be made to improve his desires, Dr. Thorndike holds.

"The desires and aversions of men can be changed as truly as their ideas and habits, though not as much or as easily. The same forces of repetition

and reward that strengthen tendencies to think and do, operate upon tendencies to like and dislike.

"If sound methods are used, men can be taught to find satisfaction in useful work, healthful and noble recreation, and the welfare of others, to a degree that the world has never seen."

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PHYSIOLOGY

Tests of Nervous System Made in Cellar Laboratory

Changing Thickness of Finger, Index of Expanding Blood Vessels, Gives Clue to Sympathetic System

NEW light on the working of the sympathetic, or involuntary, nervous system is being shed by research carried on at the National Hospital for Nervous Diseases in London.

Until some of the results of the research are published in scientific journals, in the near future, the neurologists conducting it wish to preserve strict anonymity. The reason that public attention has been focussed on the Hospital and its researches is that the Rockefeller Foundation has offered provisional grants totalling $600,000 toward new laboratories and the endowment of their work.

The research on the sympathetic nervous system is being carried on in a subterranean cellar which at one time belonged to a convent. Outside is a red-lettered notice reading "It is dangerous to open this door," for elaborate experiments are being made on human beings, and the sudden opening of the door might startle the subject and lead to his being hurt.

It is the sympathetic nervous system which is responsible for the beating of the heart, for the movements of the digestive organs and for all other bodily processes that are performed without conscious effort. It is also concerned with the various links between the emotions and physical reactions, such as that between fear and the bristling of hair which in human beings is chiefly noticeable in the effect called "gooseskin." Little is as yet known as to the details of how and why the activity of this involuntary nervous system varies among normal human beings—that is, for instance, why one of two brothers may be much more "highly strung" than another.

It is toward the solution of these and many other allied problems that this research is directed. The essence of the method lies in the measuring of reactions of the sympathetic nerves through recording changes in the blood-vessels, whose size is governed by the sympathetic system.

In practice, the thickness of a finger, which alters with the expansion and contraction of its multitude of minute blood-vessels, serves as the criterion. The changes of volume are naturally extremely small, but they are magnified by the apparatus—a pneumatic system being connected at one end to a sealed rubber finger-stall and at the other to an arrangement of mirrors—and are finally recorded photographically, along with a time-scale, on a moving roll of bromide paper.

An important feature of these experiments is that the subject is made to keep his feet in warm water. This neutralizes the ordinary effect of slight changes in room temperature. Normally these changes cause frequent slight variations in the sympathetic and vascular systems, and such variations would affect the accuracy of measurements of other sympathetic reactions.

Experiments have been made with subjects some of whose sympathetic nerves have been severed by accident or disease, or whose brains have been injured, as by the removal of brain tumors. Work on the latter type of case has shown almost certainly that the sympathetic nervous system can function normally even though the cortex is badly injured.

This important result, which suggests that the human sympathetic nervous system is centered in the diencephalon (at the base of the brain, near the pituitary or "master-gland"), will shortly be published in a scientific journal. It confirms the result recently reported by Dr. S. W. Ranson, of Northwestern University, Evanston, as the result of experimental work on animals.

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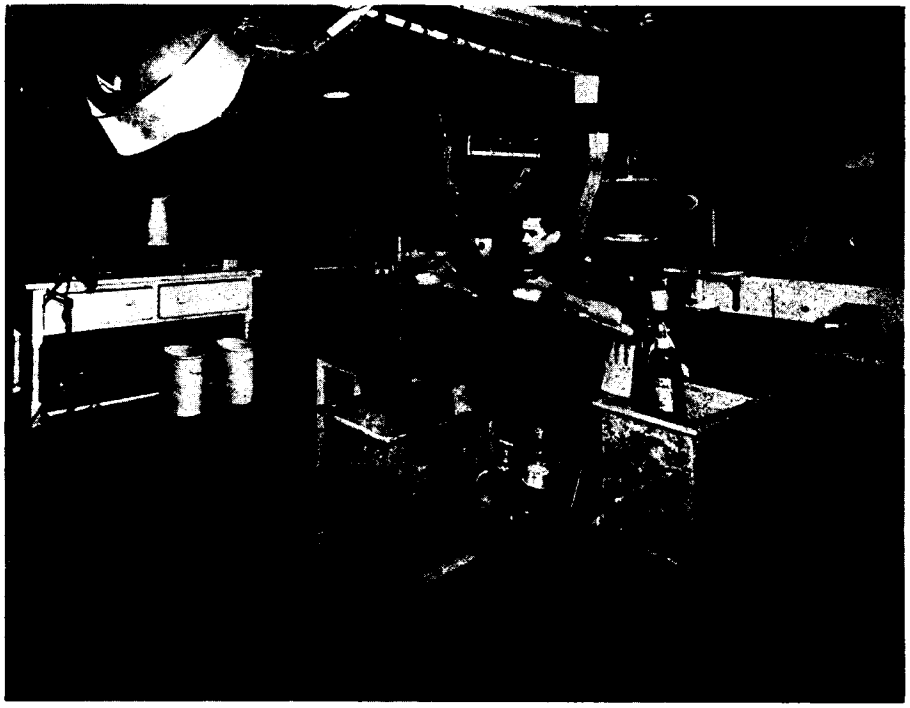

WHERE NERVES ARE TESTED

Apparatus for testing nerve reactions in the cellar laboratory of the National Hospital for Nervous Diseases, London. The foot bath is to neutralize the effect of slight changes of room temperature. A pneumatic system is connected to the man's finger to record the expansion and contraction of minute blood vessels.