

MEDICINE

Drug Stops Trembles

New drug stops parkinsonism while patient goes on taking tranquilizing drug for mental condition. Tremors are due to stimulating effect of tranquilizers on reticular formation.

➤ A DRUG that stops the finger trembling caused by some tranquilizing drugs has been found. The drug and the reason why it is effective were reported by Drs. Harold E. Himwich and Franco Rinaldi of the Galesburg (Ill.) State Research Hospital, to the American Association for the Advancement of Science in Atlanta.

The drug is benztropine methanesulphonate, trade named Cogentin. It combines the effects of atropine and the antihistamine, diphenhydramine, or Benadryl.

The finger trembling it controls is one of the abnormalities seen in parkinsonism, or shaking palsy as it is popularly known. When it hit patients getting chlorpromazine or reserpine for mental sickness, the doctor had to stop these drugs or at least reduce the dose, but this made them less effective in controlling the mental illness.

Now, according to the Galesburg researchers' findings, the new drug can be given to counteract the parkinsonism, or trembling, while the patient goes on taking the tranquilizing drug to relieve his mental symptoms.

The trembling, or tremors, are due, rabbit studies suggest, to a stimulating effect of chlorpromazine and reserpine on the reticular formation. This is a structure which extends throughout the central core of the brain and exerts control over the motor activity of the body. Atropine and similar

drugs depress the activity of the reticular formation and that may be the reason why they improve abnormal muscular function of patients with parkinsonism. The Galesburg researches show that the new atropine-like drug, Cogentin, is particularly effective in depressing the abnormal activity of the reticular formation. That may be the reason why it helps patients with parkinsonism.

These drugs not only improve the physical disability of the patients but also their subjective feelings so that the patients feel much better whether or not their motor disabilities are entirely cured.

Science News Letter, January 7, 1956

PSYCHOLOGY

Monkeys Can Learn When One Week Old

➤ A BABY MONKEY less than one week old is capable of the simple kind of learning that a psychologist calls conditioning, Dr. Harry F. Harlow of the University of Wisconsin told the American Association for the Advancement of Science meeting in Atlanta. At the age of 20 days they show a strong urge to monkey with things.

Dr. Harlow has put a total of 26 baby macaque monkeys through an extensive program of psychological testing and learning during the first months of their lives.

Beginning between 20 and 30 days of age, the monkeys displayed a strong urge to explore and manipulate the world around them and this urge was found to be apparently independent of such biological needs as hunger or thirst.

A monkey is an excellent subject for psychological research, Dr. Harlow told his colleagues. Although it can be trained so early in life, it does not become mature and "graduate" too soon. The monkey does not reach full intellectual maturity until it is two or more years old.

Most of the monkeys used in Dr. Harlow's experiments were separated from their mothers at birth and raised under completely controlled experimental conditions.

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MEDICINE

Gland Extract Tried to Stop Alcohol Craving

➤ TREATMENT with a gland extract or hormone might be the way to curb or even abolish an alcoholic's craving for drink.

The treatment works in rats. A very few observations made in a beginning trial on human alcoholics suggests that it might work for them, too.

Thyroid extract and thyroxine are the gland chemicals that do the trick in rats, Dr. Curt P. Richter of Johns Hopkins Hospital, Baltimore, reported at the meeting of the American Association for the Advancement of Science in Atlanta.

Dr. Richter gave his rats thyroid extract because he was trying to induce a craving for alcohol in them. That would have given him laboratory animals for study of alcoholism.

Thyroid extract greatly increases the rats' appetite for sugar, he had found. But it has just the opposite effect on their appetite for alcoholic beverages. Given a choice of water, alcohol, wine or whiskey, the rats preferred water. They either greatly reduced their intake of the alcoholic beverages or stopped drinking them altogether. Refusal of beer was not so striking. That may be because it has some carbohydrate in it which the thyroid extract would make the rats like as they like sugar.

Hyperthyroid patients, that is patients whose own thyroid glands are producing excessive amounts of hormone, very rarely are alcoholic, Dr. Richter pointed out. So he thinks a small daily dose might stop the alcoholic's craving for drink.

Trial of this new treatment is starting under the direction of another scientist. So far, too few patients have been observed for any report.

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If a 200-pound man stands on his right foot, he imposes a weight of 500 pounds on his right hip.

The American baby will live, on the average, 21.5 years longer than his grandparents who were born in 1900.



"ENEMY TRACKS"—This aerial photo taken by the radio-controlled drone plane shown on facing page emphasizes any tracks or marks on the earth. Front-line units operating their own drones can gather battlefield intelligence in a matter of minutes.