

## PSYCHIATRY

# Health for Mentally Ill

A body chemical, histamine, promises to double the rate of recoveries in patients treated with shock alone, psychiatrists reveal.

► **SPEEDIER** and more lasting recoveries for the mentally ill are foreseen with the discovery that a body chemical can restore mental health and make shock treatments more effective.

Histamine, which comes from an amino acid present in all living cells, followed by electric shock treatments would double the number of patients leaving state hospitals at present following shock treatment alone, trials to date indicate.

This promise of restored health for the mentally ill was revealed in a preliminary report issued at Creedmoor State Hospital in New York by Dr. Johan H. W. van Ophuijsen, and three brothers, Dr. Arthur M., Mortimer D., and Raymond R. Sackler.

First tests were made on 38 female patients with the result that 10 improved and five of these were well on the way to recovery. In comparing this group with 25 patients treated by shock, the results were found comparable.

Further tests showed that patients who did not respond to shock treatment recovered after being treated with histamine followed by another course of shock. Also, the psychiatrists pointed out, they got a definite impression that fewer shock treatments are needed when injections of the chemical precede shock.

A three year follow-up of these patients further revealed that even if the histamine-treated patients have a relapse their chances for recovery are better. The doctors now believe that some patients need small doses of the chemical at intervals to keep them healthy, just as the diabetic needs insulin.

"As we see it now," they said, "histamine may well be joined by such biochemotherapeutic agents as the B vitamins (probably with significant reference to B-12 and nicotinic acid), insulin and others to offer medicine a third avenue of attack upon psychiatric disorders."

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## CYTOGENETICS

# Hereditary Cell Changes

► **BENZENE** hexachloride, one of the powerful new insecticides, is capable of producing drastic hereditary changes in plants by multiplying their chromosome counts, after the fashion of colchicine. This is disclosed in the journal *SCIENCE* (May 6) by Dr. Dontcho Kostoff of the Academy of Sciences in Sofia, Bulgaria.

Benzene hexachloride, known also by the longer chemical name of hexachlorocyclohexane, was used in several forms in Dr. Kostoff's experiments, and applied to a number of plants ranging from corn and wheat to sunflower and mustard. Many of the new, giant, multi-chromosome cells were abortive, but large numbers of them were capable of reproduction, continuing their novel kind.

Dr. Kostoff sees two possible significances in his discovery. The first may be beneficial: "The effect of hexachlorocyclohexane is so striking that it can be used as a polyploidizing agent, especially when one considers that it is much cheaper than other such agents."

The second possible significance is not so good, and leads to a warning: "Such insecticides or fungicides, when applied, may increase hereditary changes in cultivated varieties ("pure lines"), leading thus to more rapid degeneration of the highly bred, uniform varieties. This means that

when such insecticides or fungicides are applied the seeds of the propagated varieties should be changed more often so as to secure new nondegenerated stocks."

Slightly over a decade ago Dr. Kostoff attracted the attention of geneticists, and of biologists generally, by his discovery of similar effects produced by a different chemical, acenaphthene. He was at that time working in Moscow, at the Academy of Sciences of the USSR.

Science News Letter, May 21, 1949

## BIOLOGY

## Royalty Lowers Its IQ by Family Inter-Marriages

► **WHEN** kings and princes marry within their own family, the intelligence of the children is generally lower than is that of the children of those who pick their brides outside the family.

This was found when Dr. S. A. Asdell, of Cornell University, studied the records of 690 members of royalty. In intelligence, they ranged from imbeciles and feeble-minded, including Ivan and Feodor of Russia, sons of Alexis, and Charles of Spain, to such highly intelligent and successful rulers as Frederick the Great of Prussia and his sister Louise Ulrica, Queen

of Sweden, Gustavus Vasa of Sweden, Louis II, the Great Conde, William the Silent of Orange and Catherine II, the Great, of Anhalt-Russia.

The rating on intelligence went steadily down as the record of inbreeding in the ancestry increased, Dr. Asdell reports in *HUMAN BIOLOGY* (Dec. 1948).

But this does not mean, he points out, that the inbreeding caused the low intelligence in the children. The men who chose their brides within the family were of lower intelligence than those who married girls not related to them.

The decline of intelligence with inbreeding is probably due, Dr. Asdell believes, to the poor stock which has selected wives within the immediate family.

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## WILDLIFE

## Spring Muskrat Trapping Called Menace to Ducks

► **SPRING** trapping for muskrat is a menace to the duck population, warns Jay S. Gashwiler of the Maine Cooperative Wildlife Research Unit, in the *JOURNAL OF WILDLIFE MANAGEMENT* (April).

Traps set for muskrat very often catch ducks instead—and this at the very beginning of the breeding season, when the females are due to bring off their broods in a short time. Total number of ducks thus killed is estimated at close to 2,000 in one year in the state of Maine alone. Since there are 21 other states and Canadian provinces in which similar losses can occur, the total muskrat-trap mortality among breeding ducks is apparently quite serious.

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## INVENTION

## New Device Says "When" In Making Mixed Drinks

► A **NEW** device for literally showing you just how much of what to put in mixed drinks has just been patented.

In the patent granted Guy P. Le Moyné of Fort Myers, Fla., he says that he has a device with which "anyone, without prior training or practice, may mix any one of a wide variety or types of mixed drinks with the accuracy of a skilled and trained bartender."

Mr. Le Moyné has put two glasses on a rack with graduated recipe strips for different drinks. His recipe strip, on a rod by the glasses, has instructions for mixing the drink, plus the lines that "say when" for each of the ingredients.

You change drinks by selecting different recipe strips. The two glasses permit up to three of the same drink to be made at one time.

Patent number 2,468,987 has been granted Mr. Le Moyné.

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