

Medical Sciences Notes

VETERINARY MEDICINE

A Law Against Bees

Henceforth, European bees are forbidden to enter Australia.

In the interest of the continuing good health of Australian bees, their European counterparts are banned under newly amended quarantine regulations.

The Australian Northern Agricultural Region apiary officer said the regulations are designed to prevent the introduction of "Isle of Wight" disease to the island continent.

However, bees from Canada, the United States and New Zealand, where the disease is unknown, are still welcome.

PSYCHOPHARMACOLOGY

CNS Drugs Lead All Others

The pharmaceutical industry last year spent more money on developing new tranquilizers, stimulants, sedatives and analgesics, than on any other kind of drug.

Central nervous system drugs accounted for 19 percent, or \$37.1 million, of a total \$194.7 million spent on applied research by 42 leading firms.

Cancer drugs and hormones came in third, with 16.9 percent, after second-ranking anti-infectives, which took 17.4 percent of the total.

The figures underscore the fact that psychiatrists now face the problem that has plagued physicians in the past—proliferating drugs and difficulty in judging their value.

Moreover, the specific brain action of the drugs is still unknown in many cases, since basic knowledge of the brain is not yet that advanced.

METABOLISM

Brain Survives Deprivation

The brain may survive oxygen deprivation if the body temperature is lowered.

Two researchers in the I. P. Pavlov Institute of Physiology in Leningrad, report research on rats in the Dec. 10 issue of *Nature*.

It is well known that deficiency of oxygen to the cerebral tissues inhibits the intensity of metabolism in the brain, and the Russian experiments explain the mechanism, using as an example the synthesis of phospholipids. (Phospholipids, or phosphatides, are found in all living cells in connection with fat storage.)

Using male albino rats of the Wistar strain, Drs. D. A. Chetverikov and S. V. Gasteva proved their point by four experiments—all in a cooled barochamber with lowered oxygen for two hours. When the floor of the chamber was heated, however, half of the rats died; examination indicated that it was the hypothermia, or cooling that diminished the oxygen requirements of tissues by reducing the rate at which metabolic processes use energy.

PHENYLKETONURIA

Legal Machinery Questioned

Laws in 36 states have been rushed through for the testing of babies for phenylketonuria, an inherited metabolic disease that has been associated with mental defects; they may be a mistake.

Dr. Samuel Bessman, a University of Maryland scientist who has been doing research on PKU for nearly 20 years, has now come to the conclusion that not all individuals who have the untreated chemical syndrome are or will become mentally retarded.

He agrees that there is extensive evidence that the disease is inherited through a defective gene that controls the enzyme phenylalanine hydroxylase. He also believes that lack of this enzyme results in accumulation of certain amino acids in the blood.

But he is not convinced that mental retardation in PKU patients is prevented by lowering high blood levels of phenylalanine through diets deficient in this amino acid, beginning at birth or early infancy.

More study is needed, he says in the *New York State Psychiatric Journal*, before telling the public that an answer to the problem has been found. "We may be doing as much harm as good," he warns.

PKU is estimated to affect some 400 babies a year in the U.S.

DRUG REGULATIONS

Time-Release Aspirin Get It Again

The Food and Drug Administration has moved to pull another time-release aspirin off the market. New evidence has been gathered that refutes manufacturer's claims that the aspirin spread relief over a period of hours, acting much the same way time-release cold capsules do.

There seems to be no quarrel with the aspirin as aspirin. The problem is that they sell for a high price and claim to do something that has not been proved.

FDA's most recent action was taken against Relay, a product of Richardson-Merrell, Inc.

The company has 30 days in which to request a hearing.

FDA has taken similar action against Measurin and Stendin, two other time-release aspirin, on grounds that the investigator submitting primary data in support of manufacturers' claims was ineligible.

PALEONTOLOGY

Bat Fossil Bows After 25 Years

The fossil remains of a 50 million-year-old bat, uncovered in Wyoming in 1933 and moved to Princeton in 1941, have been named and numbered after 25 years of patient study by Dr. Glenn L. Jepsen.

Its name is "Icaronycteris index" after the legendary Greek, Icarus, who fell into the sea and drowned after his artificial wings melted when he flew too close to the sun. Also to be known as "PU 18150," the bat probably met death by drowning in what was once a lake in Wyoming.