MEDICINE

Cortisone Aids Sarcoidosis

➤ CORTISONE, adrenal gland hormone famous for the relief it brings in crippling, painful arthritis, brought "prompt and marked improvement" to two patients suffering from another disease, sarcoidosis.

The disease is a chronic ailment affecting lymph glands, lungs, bones, intestines, spleen, liver and skin separately or in various combinations. It occasionally is a serious illness resulting in blindness, respiratory insufficiency or death. No cause for the disease is known and so far no effective treatment has been discovered.

The improvement in the patients under cortisone treatment came in lung, skin, tear gland, parotid gland and lymph node involvement. One patient showed improvement in the eye inflammation within 48

hours and at the end of a week was "elated over the change in her appearance" caused by the flattening of the lumps on her skin that came from the disease.

These two patients had severe and widespread sarcoidosis, Drs. Maurice Sones, Harold L. Israel, Mary B. Dratman and Jesse H. Frank, of the Woman's Medical College of Pennsylvania, state in their report (New England Journal of Medicine, Feb. 8).

Besides the improvement in their two patients, these doctors report finding some evidence that sarcoidosis may be due to or accompanied by impaired functioning of the adrenal glands.

Science News Letter, February 24, 1951

WILDLIFE

Fleas Keep Streams Clean

THE fresh water flea and a host of its neighbors are serving as "guinea pigs" to help keep our rivers and streams clean.

Dr. Charles E. Renn, of Johns Hopkins University, is using the minute animals to tell just how much waste material can safely be dumped into rivers or streams. If the fleas, nymphs and larvae he uses for his test can take it, chances are that the stream and its fish can too.

Aim of the studies is two-fold; to find how much pollution the tiny animals take before dying and to find out how the pollution affects their survival over a long period of time.

Some industrial wastes contain poisons which may break down and gradually become harmless as they are carried along



in the stream. These do little damage, except in the immediate neighborhood of the plant. Some waste material, however, may be directly and violently toxic to both fish and fish food.

The tiny animals that Dr. Renn uses in his studies are the food which game fish need for survival. Without this food, the fish die out and cannot be replaced. Dr. Renn heads a group investigating industrial waste disposal for the National Research Council.

Science News Letter, February 24, 1951

PUBLIC HEALTH

African Children Have Cirrhosis of the Liver

➤ UNCOUNTED THOUSANDS of African children from one to six years old suffer from cirrhosis of the liver, a disease usually connected with alcohol.

However, it occurs in these children when they are weaned from their mothers and immediately put upon the usual starchy diet their elders eat. The condition is accompanied by some loss of pigmentation and, sometimes a straightening of kinky hair. It can be cured or prevented by feeding the children skim milk.

The disease is known all over Africa—in fact, it is estimated that more or less all children in Africa suffer from it at some time. It is called Kwashiorkor, an Ashanti word meaning "golden boy" or "red boy" and takes its meaning from the loss of pigmentation which sometimes goes with the disease.

A team of researchers headed by Dr. Marcel Autret, and under the auspices of the Food and Agriculture Organization and the World Health Organization, has just

returned from Africa where it studied the disease. The researchers found that it is caused by a lack of protein in the diet. However, it can be complicated by other deficiency diseases, such as pellagra.

The disease occurs most frequently where there are no cattle or where fish are not readily available. The people know instinctively what they lack because when they secure a cow or a steer, every last bit of it is eaten. Horns are ground up, tails and even the skin are cooked. Children search for caterpillars, bats, slugs and crickets. These are also sold in market places.

The most pressing need, Dr. Autret said, is for a cheap milk substitute. There are mountains of dried skim milk in the United States, but few dollars with which to buy it. A cheap substitute for milk, he explained, could be made from peanuts. Also, the people must be taught to grow more protein-rich food, such as beans and peas, and to catch more fish.

Science News Letter, February 24, 1951

GENETICS

Inheritance Method Of Mink Colors Found

MORE MINKS for milady in the popular platinum and steelblu colors will result from the discovery of the exact location of the units of inheritance of these hybrids.

Scientists have found that the inheritance units giving the platinum and steelblu mutations are located at the same point on one of the 14 pairs of chromosomes. Chromosomes are minute bodies that carry the hereditary units in the germ cells.

Because of this knowledge, mink breeders can be advised how to make matings that will produce the greatest number of each of these types the platinum and strells in the p

of these types, the platinum and steelblu. Mink skins of the mutated colors are about half of the 2,000,000 ranch mink skins produced annually in this country. On the average they bring higher prices than the natural-colored skins. The discovery about the units of inheritance was made jointly by Department of Agriculture and University of Wisconsin and Wisconsin State scientists.

Science News Letter, February 24, 1951

INVENTION

Vulcanize Tires With Radio Frequency

➤ PATENT was recently issued for an apparatus for vulcanizing pneumatic tires with radio-frequency electric current. This brought Robert S. Enabnit, Cuyahoga Falls, Ohio, patent 2,541,644. Rights have been assigned to Wingfoot Corporation, Akron, Ohio. The apparatus is claimed to eliminate all the difficulties encountered in previous attempts to vulcanize by radio-frequency current, and it is more simple and less expensive.

Science News Letter, February 24, 1951