

MEDICINE

Liver Extract Treatment

Sulfa drug poisoning which in about three out of every 100 patients causes anemia or another severe blood disorder, may be overcome by liver extract.

► **SULFA DRUG POISONING**, which in about three out of every 100 patients, causes anemia or another severe blood disorder, granulocytopenia, may be overcome by liver extract, Dr. Arthur Kornberg, Dr. Floyd S. Daft and Dr. W. H. Sebrell, of the National Institute of Health, U. S. Public Health Service, have discovered.

Rats that developed these two blood disorders from doses of the three most commonly used sulfa drugs, sulfanilamide, sulfathiazole and sulfadiazine, were cured of the granulocytopenia in four days and of the anemia in about 10 days, the scientists report (*Science*, July 2).

The blood disorders were corrected in spite of the fact that the animals continued to get doses of the sulfa drugs. For humans, this would mean not only

swift recovery from the poisonous effects of the sulfa drugs but also continuance of the sulfa drug until the pneumonia or other infection was cleared up. At present, when a patient shows signs of sulfa drug poisoning, the drug must be stopped even if he has not had enough to rout the germs attacking him.

Use of the liver extract treatment for humans sensitive to sulfa drugs will not be possible until a very concentrated liver extract is available. The liver extracts now available for treatment of pernicious anemia would have to be given in huge doses of approximately half a pound a day. This would not only be expensive but, because of the bad taste of the extract, would be very hard if not impossible for the patients to take.

Science News Letter, July 17, 1943

At this time, it was emphasized, there are many possibilities for cooperation between the scientists of the two countries, and the elections just culminated are considered a prelude to further joint efforts.

Science News Letter, July 17, 1943

MEDICINE

New Sulfa Triumphs Over Scarlet Fever, Eye Disease

► **TWO NEW SULFA** drug triumphs are among major medical advances reported in the *Journal of the American Medical Association* (July 10).

A relatively new sulfa drug, called sodium sulfathiazole desoxyephedrine and originally developed for nasal infections, greatly speeds recovery in the first, acute stage of shipyard eye (epidemic keratoconjunctivitis), Dr. Harry S. Gradle, of Chicago, and Dr. G. H. Harrison, of Waukegan, Ill., report. Instead of lasting from 14 to 18 days, as it does in untreated cases, the first stage of this disease was reduced to from three to seven days with the new treatment.

Small daily doses of sulfadiazine effectively controlled an outbreak of scarlet fever at a U. S. Naval station, Lieut. Robert F. Watson, Lieut. Comdr. Francis F. Schwentker, Comdr. J. E. Fetherston and Dr. Sidney Rothbard, of the U. S. Navy Research Unit at the Hospital of the Rockefeller Institute, New York, report. They state that there is now enough evidence to justify the use of this drug in controlling epidemics not just of scarlet fever but "of streptococci infections of the respiratory tract."

Science News Letter, July 17, 1943

ENGINEERING

Plastic Bearings Replace Metals in New Invention

► **A REVOLUTIONARY** new type of bearings, made of plastics reinforced with glass fibers, promises to replace babbitt, bronze and other war-scarce metals, in the invention on which three Cleveland inventors, J. V. O. Palm, J. K. Anthony and J. E. Wilkey, obtained patent 2,322,771. They claim that their new bearings have under test supported 100% more load than is required of standard babbitt bearings. Rights in the patent have been assigned to the Cleveland Graphite Bronze Company.

Science News Letter, July 17, 1943

One-fourth to one-third of our *body energy* comes from fats in the diet.

GENERAL SCIENCE

U. S. Scientists Honored

Three Harvard professors, Drs. Harlow Shapley, L. C. Graton and P. W. Bridgman, are elected to Mexican National Academy of Sciences.

► **THREE HARVARD PROFESSORS** who have recently visited Mexico have been elected correspondent academicians of the Mexican National Academy of Sciences.

Those honored were: Dr. Harlow Shapley, director of Harvard College Observatory, Dr. L. C. Graton, Harvard geologist, and Dr. P. W. Bridgman, Harvard professor of physics. All three were among the scientists from the United States who attended the conference on physics held in Puebla in May.

This is considered as an important step furthering closer cultural relations between Mexico and the United States.

Among Mexican scientists, their national academy with its building near the National University, is familiarly known as "Alzate" because its formal name is Antigua Sociedad Científica Antonio Alzate.

"Benjamin Franklin played an im-

portant part in the science of his time in Mexico," Dr. Agustin Aragon Leiva observed in the course of remarks upon the relationships of science in Mexico and the United States. "Antonio Alzate, the Mexican scientist of those times after whom the Academy is named, repeated the experiments of Franklin and explained them to his colleagues. In the early days, the American geologist, McClure, studied the Mexican record of the rocks and spent much of his life here.

"To an extent unrealized the cultures of Mexico and the United States have common origins. The hereditary roots of Mexico rest not alone in the Spanish and Indian ancestors of many of our people, but we, like our neighbors of the United States, have a large percentage of French, Polish, Russian, Dutch, Italian and German blood in our veins."