noises are quite unable to cause false flashes on the dial.

The altimeter will probably be located near the tail of the ship, with two concealed funnels, sending and receiving, pointed downward. Light cloth may cover the funnels to preserve

streamline effects without serious interference with sound. Furthermore, current researches in reduction of airplane noise give hope of making the altimeter still more sensitive, adding many hundreds of feet to the practical working range.

Science News Letter, May 26, 1934

ZOOLOGY

## Twin Chimpanzees Born For First Time in History

CHIMPANZEE twins, the first pair on record, have just been reported to the world of science by Dr. Robert M. Yerkes of Yale University's laboratories of Comparative Psychobiology.

The twins, one of them male and one female, were born at the University's Anthropoid Experiment Station at Orange Park, Florida, and are nearly a year old, Dr. Yerkes stated in a report to the current issue of *Science*.

Chimpanzees and other great apes resemble man in that they rarely give birth to more than one infant at a time. Dr. Yerkes and his associates were unable to find a single published report of twin births among the apes. They therefore conclude that the pair born at Orange Park on June 26, 1933, are the first of their kind known to science.

Chimpanzee infants have been exhibited by showman as twins, but Dr. Yerkes has not seen any evidence that would convince him that these really were twins. In one case the showman, when told of Dr. Yerkes' special interest, readily admitted that his pair were not twins.

## Famous Sister

The twins have an eight-year-old sister who has won fame on her own account. She is "the first chimpanzee of dated birth and positively known parentage and life-history to mature sexually in captivity," so far as Dr. Yerkes could find from studying chimpanzee records.

The father of the twins came from Africa and was judged to be eleven years old when the twins were born. Their mother was judged to be twenty years old at their birth. She came to the colony from Havana and is known to have borne two other infants besides the twins and their famous sister. The twins themselves were born somewhat prematurely but were normal and have

developed normally and uneventually.

Nine other seemingly normal births occurred at the chimpanzee colony between September, 1930, and November, 1933, Dr. Yerkes reported. All of the infants except one are now living.

Among the other primates, such as lemurs, gibbons, baboons and monkeys, twin births have occasionally been observed, Dr. Yerkes found. But except for the two he has just reported, no authentic twins are known among chimpanzees, orang-utans or gorillas.

Science News Letter, May 26, 1934

CHEMISTRY

## Heat Treated Wastes Become "Cream" of Oil

BY A "SWEATING" heat treatment of petroleum, called pyrolysis, chemists are now using former oil waste products to make a variety of alcohols highly desired by the lacquer, paint and varnish industry as solvents; a soap which cleans and lathers instantly in salty ocean water; a disagreeable smelling substance to go into the natural gas supply of homes and thereby make possible the quick detection of a leak; and synthetic rubber compounds resistant to gasoline and other rubber solvents.

These new by-products are the "cream" skimmed from the raw "milk" of petroleum, Carleton Ellis of Montclair, N. J., reported to the American Institute of Chemical Engineers.

Chemistry, Mr. Ellis indicated, is attacking the problem of what to do with the many former wastes encountered in the processing of oil for the automotive industry with more than an even chance that a great field of research will be opened, rivalling the hundreds of thousands of dyes and other substances made from coal tar.

Coal tar is the sticky, black ooze left behind after coal is heated in containers and coal gas driven off. From coal tar are obtained hundreds of aniline dyes like indigo; medical preparations such as phenol or carbolic acid; artificial flavoring and important chemical base products like anthracene and naphthalene.

The heat-treating of petroleum not only produces many of the important hydrocarbons found in coal tar on which that giant chemical industry is based but the presence of these hydrocarbons in gasoline, later obtained from the oil, gives the gasoline anti-knock properties which enhance its value as a motor fuel. The ability of chemistry to obtain many alcohols from petroleum will restore grains and natural foodstuffs from the position of contributors to raw industrial sources to their natural position of foods.

"Instead of serving as industrial materials," said Mr. Ellis, "there will be more grain for cattle and cereals, more olive oil for salad dressings, and more vegetable oils for other sorts of cooking. At the moment these prospects may not seem important, but in later years their value should have abundant opportunities to become established."

Ethyl alcohol, he added, will eventually excel all the alcohols in only one field and for one purpose—for drinking.

Science News Letter, May 26, 1934

In a national health competition among cities, Baltimore won first place among cities of more than 500,000 population.

The Field Museum has acquired a rare collection of plant specimens gathered in Peru by the first botanists who ever visited that country, 1778 to 1788.

## SCIENCE AND THE RECOVERY PROGRAM

an address by

Dr. A. M. MacMahon Curator of the Department

of Physics, Museum of Science and Industry

Wednesday, May 30, at 3:30 p.m., Eastern Standard Time, over Stations of the Columbia Broadcasting System. Each week a prominent scientist speaks over the Columbia System under the auspices of Science Service.