

most ancient star-like and thread-like organisms, which may have been living nearly 2,000 million years ago, were found on the Gunflint range of Canada and Minnesota.

Surgery on lamb fetus, which is then allowed to grow normally in the ewe, helped scientists learn about antibodies, tissue transplants and wool growth.

A genetic marker of disease susceptibility was found to link mink, cattle and children.

The iron-containing chemical ferredoxin is one key to the process of photosynthesis, by which plants use sunlight to manufacture their own food, it was reported.

Pellets of the chemical fenuron, when strewn in a forest, were found capable of destroying unwanted older trees and permit valuable seedlings to thrive.

The chemical ethylene, present in plant tissues, acts as a hormone to stimulate fruit to ripen, studies showed.

A million-dollar program was undertaken by the United Nations to study the feasibility of releasing sterile Mediterranean fruit flies in Central America in order to suppress infestation there and prevent the spread of the insects to Mexico and the United States.

Domestication of shaggy musk oxen, denizens of cold Arctic regions, was started for the production of wool and food.

The brain of an octopus was found to have two separate memory storehouses, each with four distinct auxiliary lobes.

A pink, eight-legged mite was discovered thriving on a mountain range 309 miles from the South Pole, closer than any other creature yet found.

In a planned program, a painless drug was fed to pigeons in New York City in an effort to cut down egg production and thus reduce the population of the birds.



Humble Oil & Refining Co.

BETSY'S WRATH—The shattered beams of a building brought down by Hurricane Betsy are here contrasted with the calm, sunlit sea off Grand Isle, La. The storm wrecked the town, blowing at least eight feet of water over most of the island.

Scientists worked to crack the code of visual, auditory and tactile gestures that horses, honeybees, gorillas, snails and many other animals use to communicate with one another.

Memory may involve the rapid production of highly specialized proteins in the brain as they respond to alterations in the internal environment, scientists found.

A new technique for identifying plants using two-dimensional paper chromatography to take patterns of extracts from plants was developed.

Rats at cold temperatures continue to function better than those subjected to hot temperatures, scientists found.

Polar bears are slowly evolving into a sea animal, it was reported.

A tiny parasitic ant thriving in South America was being studied as a potential control for the imported fire ant in the southern United States.

Satellites were forecast to be of invaluable aid to agriculture by recording strips of crops 50 to 100 miles wide to check on growth and prevalence of insects, weeds or diseases, scientists said.

Catnip was found to attract cats and other felines but repel certain insects.

Wild African hunting dogs keep order in the pack by making the weaker members crawl and beg for food, animal behaviorists reported.

A new kind of black fish with orange spots, named *Kasidoron edom*, was discovered off the coast of Florida.

Yellow fever mosquitoes were attracted to men more than to women, and to persons with high skin temperature, entomologists found.

Scientists continued their search to find out why thousands of honeybee colonies are disappearing or dying since the bees' deaths are not caused by insecticides, poisons, diseases or climatic conditions.

Scientists were able to change the fur of a weasel from brown to white by removing the pituitary gland of the animal.

Sea lions use eyes by day to detect underwater objects, but emit clicks as radar to find their way by night, scientists found.

An atom-powered heart run by a four and a half pound atomic steam engine implanted in the abdomen and a transistorized ear that will produce intelligible sound through direct contact with a brain nerve were under development.

A greatly miniaturized heart pacemaker that weighs only 1.8 ounces and can be implanted in a child's abdomen was developed.

The use of radioactive technetium 99 in a new scanning technique for examining organs of the body reduced the radiation danger to a patient to virtually nothing since exposure of less than a minute is required and radiation does not linger in the body.

A possible method of birth control was studied with a water extract of the gray millet plant used by Shoshone Indian squaws in Nevada to suppress ovulation.

An instrument called an endoscope was under development to enable physicians to examine the middle ear visually with little discomfort to the patient.

A yellow-seeded soybean, resistant to the soybean cyst nematode, was made available to farmers.

An angora mouse with long hair, a recessive mutation, appeared among hundreds of thousands of inbred mice in Jackson Laboratory, Bar Harbor, Maine.

Termites cannot withstand extremes of hot or cold temperatures, scientists found.

In a study of photosynthesis, flashing laser light was used to show that it takes chlorophyll from purple sulfur bacteria two-millionths of a second to pass laser energy onto an enzyme.

The Yerkes Regional Primate Research Center on the Emory University Campus at Atlanta, Ga., considered to have the most valuable collection of non-human primates in the world, was dedicated.

Chemical compounds of biological origin were definitely found and identified in meteorites, and studies were in progress to determine their origins.

A new antibiotic, anthelvincin, was found to be successful in ridding swine of whipworm.

Microorganisms 700 million to 900 million years old that may represent a transition period in the evolution of plant life were discovered in well-preserved condition in central Australia.

CHEMISTRY AND PHYSICS

A new theory called SU-6, that greatly extends knowledge of nuclear particles, demonstrates an underlying unity among the known families of particles, predicts the existence of new particles and offers considerable insight into how they interact with each other in the nucleus and in experimental situations, was reported.

Evidence for the possible existence of an antiworld, antigalaxies or antiuniverse was strengthened with the discovery of the antideuteron, the largest known particle of antimatter and the first known antinucleus made up of more than one antinucleon.

A confirming experiment using the CERN accelerator in Geneva showed that time has only one direction of flow under certain conditions and proved the non-existence of the fifth force, indicating that the symmetry law known as "CP invariance" does not always apply in the world of the atomic nucleus.

The discovery of two different kinds of naturally occurring neutrinos, reported independently within two weeks of each other by the same scientists who first detected man-made neutrinos, was predicted to open a new chapter in man's studies of this elusive subatomic particle.

Synthetic metals were created from non-metals by using high pressures.

As predicted in theory, but not previously observed, protons and neutrons were found to exert weakly interacting forces, as well as strong forces.

The five nucleotides that make up deoxyribonucleic acid, DNA, and ribonucleic acid, RNA, were synthesized, using only a simple phosphate added to ammonia, methane and water.

Lawrence Radiation Laboratory at the University of California drew plans for a 200 billion electron volt circulator proton