

INVENTION

Patents of the Week

A device that controls the spinning rate of satellites, used by the first solar observatory S-16 and by Vanguard II, has been awarded a patent.

► A DEVICE for controlling the spinning rate of satellites, used by the first orbiting solar observatory launched last March, received U.S. patent 3,072,363.

Jets of compressed gas reduce the spin rate in the device invented by Robert C. Baumann and Leopold Winkler, now with the National Aeronautics and Space Administration, the agency that launched the S-16. The gas-jet spin reducer was also used on Vanguard II, hurled into orbit in Feb., 1959, and still circling earth. Improvements made since the patent was filed will be used for the second orbiting solar observatory S-17, scheduled to be launched this year.

A compressed gas, such as nitrogen, is released through nozzles so that the thrust produced is opposite to the satellite's rotation. The principle could also be used to speed up a satellite's spin rate. Rights were assigned to the Government.

Bees for School Observation

School children can observe working bees in a transparent holder that won patent 3,071,784 for Herman S. Kolb, 737 W. Main, Edmond, Okla.

Several improvements have been made in the device since the patent was applied for in 1959. The improved holder is now being marketed by Mr. Kolb at \$9.85.

About four ounces of worker bees and a queen bee are included in each hive when shipped. The bees are provided with enough food and pollen to last until arrival at destination. They can then be watched through their entire life cycle of feeding, gathering honey, laying eggs and hatching.

The hives can be shipped only from April to November, but the inventor is working to extend these limits. Several hundred have been sold to schools.

Treatment for Acne

A method of treating acne by a drug taken orally, tolbutamide, was granted patent 3,072,527. Tolbutamide is used to treat diabetes and also multiple sclerosis. Its effectiveness against acne was unexpected because tolbutamide has no bacterial effect.

However, in treatment of 26 patients who were resistant to therapy by usual methods, such as hormones and X-ray, excellent to fair results were obtained in all cases.

The late Jacob Louis Cohen of Windsor, Ontario, Canada, assigned rights through his estate to Frank W. Horner, Limited, Mount Royal, Quebec, Canada.

Other Significant Patents

Concentrated milk products, sterilized by high temperatures for very short periods, do

not form curd particles when a hexose or lactose is added. This claim won Abraham Leviton of Washington, D. C., and Michael J. Pallansch of Vienna, Va., patent 3,072,491, assigned to the Secretary of Agriculture.

A chemically stable protective film that reduces the deterioration of reactor materials in the high temperatures of operating nuclear reactors is covered by patent 3,072,553, for which Dr. Chauncey Starr, now president of the Atomic International division of North American Aviation, Inc., Canoga Park, Calif., waited nearly 15 years after application. Patent rights are assigned to the Government through the Atomic Energy Commission.

A fishing lure that automatically and continuously produces sound to attract fish won patent 3,071,884 for Kenneth J. Peltz of Hatboro, Pa.

Processing such refractory metals as titanium, zirconium and chromium by embedding them in ice or dry ice while being pulverized gained for Henry S. Dombrowski of Wilmington, Del., patent 3,072,347, assigned to Du Pont.

• Science News Letter, 83:63 January 26, 1963

ARCHAEOLOGY

Archaeologists Excavate Old South Texas Mission

► ARCHAEOLOGISTS have begun excavations at the site of a little known South Texas mission to learn more about its 18th century Spanish and Indian inhabitants. The diggings are at Mission San Lorenzo de la Santa Cruz, Camp Wood in Real County. University of Texas archaeologists have already uncovered a deep room of three-foot-thick adobe brick walls, a partially burned roof made of timbers and clay showing grass impressions and the burial site of a young Indian woman.

• Science News Letter, 83:63 January 26, 1963

TECHNOLOGY

Chemical Retardant Bombs Forest Fire

► A CHEMICAL fire retardant especially designed for aerial application to forest and brush fires is Monsanto's Phos-Chek, a dry mix. When added to water, it produces a viscous noncorrosive slurry which is dropped by aircraft as a chemical barrier against advancing ground or forest fires.

The material clings to trees and brush, and only heavy rains can wash it away. It is a fertilizer, and is not chemically harmful to plant growth.

• Science News Letter, 83:63 January 26, 1963

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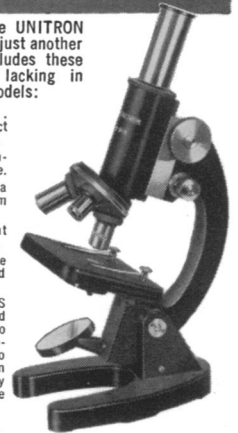
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