

INVENTION

Patents of the Week

A Texas-style "Christmas tree" protector, an instrument to test a civil defense alert system and an improved mouse cage were among inventions awarded patents.

➤ **RUSHING** the Christmas season, as now seems to be customary, the U.S. Patent Office issued patent 3,063,500 for a "Christmas tree" protector—Texas-style.

Christmas tree is what oilmen call the collection of valves, pipes and fittings at the top of the well controlling the flow of oil and gas. The new patent covers an improved housing for offshore wells in which the equipment must withstand the corrosive effects of salt water.

Campbell F. Logan of Jacksonville, Fla., devised the method for providing improved protection for underwater Christmas trees. His method also simplifies installation procedures.

The Christmas tree is enclosed in an especially designed air-filled chamber, according to his invention.

Civil Defense Test Instrument

An instrument to test whether or not the system that is scheduled to alert all homes and business offices in case of an enemy attack is actually working as it should was granted patent 3,064,190.

Frank H. Inderwiesen of Prairie Village, Kans., assigned rights to the Government through the Office of Civil Defense, now part of the Department of Defense. Earlier this year, he was awarded a patent for a receiver which the instrument now patented is designed to test.

The system for alerting all citizens in case of attack is called "NEAR," for National Emergency Alarm Repeater. Using it, receivers attached to electrical outlets in a home or office would broadcast a loud and distinctive sound when a certain signal was detected.

Defense officials earlier this year awarded a contract of more than a million dollars to the Midwest Research Institute, Kansas City, Mo., to build a model of the alerting system.

The testing instrument devised by Mr. Inderwiesen determines whether the signal being sent over electrical power lines is that for which the receiver is designed. The instrument also tells visually, if there is any variation, whether the signal frequency is greater or less than the desired frequency.

Other Significant Patents:

A method of making high-flying balloons using straight cylindrical instead of curved sections, thus eliminating the need for taping the sections together and thereby causing uneven heating as the balloon rises very high into the earth's atmosphere. Leland S. Bohl, Dr. Edward P. Ney and Charles L. Critchfield of Minneapolis, and William F. Huch and Dr. John R. Winckler

of St. Paul, Minn., assigned rights to patent 3,063,656 to the Government through the Secretary of the Navy.

For inflating such high-flying balloons and launching them, patent 3,063,657. Ernest A. Coester also assigned rights to the Government through the Navy for his improved method of slowly filling balloons made of thin plastic films so that winds have less chance to twist them during inflation.

A tank simulating the extremely low pressures of interplanetary space in order to test rockets using ions for propulsion. Ion rockets are believed one of the most promising methods of powering space vehicles. A high-vacuum condenser tank for testing these rockets won patent 3,063,291 for James Howard Childs of Olmsted Falls, Ohio, and William R. Mickelsen of North Olmsted, Ohio, who assigned rights to the National Aeronautics and Space Administration.

A traction device for correcting bunions and a sandal for exercising feet, now available in stores. Rights to patents 3,063,446 and 3,063,457 were assigned to The Scholl Mfg. Co., Inc., Chicago, respectively by Milton R. Levitt of New Brunswick, N. J., and Ernst Bittner and Werner Gnass of Frankfurt am Main, Germany.

An improved cage in which to keep mice or other small animals for biological studies. John B. Fuller and James C. Plagge of Oak Park, Ill., with Walter S. Moos of Northbrook, Ill., won patent 3,063,413 for their method of housing experimental animals.

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ANTHROPOLOGY

Solar Cookers Introduced Into Mexican Villages

➤ **SOLAR COOKERS**, used to compete with and supplement the charcoal and oil stoves traditionally used, have been introduced into rural Mexico. But Dr. James Silverberg of the University of Wisconsin, Milwaukee, told the American Anthropological Association in Chicago that unless some means of local production of the devices is developed they will not be a permanent part of everyday living.

Wisconsin's solar energy laboratory produced the reflector-type cookers, which use the sun's rays as a source of heat. Then an anthropological team attempted to introduce them. Mass production and distribution in cooperation with Mexican Government agencies is being attempted. Experiments are also underway to obtain reduced-cost, single-unit production with locally available materials, skills and labor on a village industry or do-it-yourself basis.

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Computer Sorts Pottery

➤ A **COMPUTER** has been put to work to help sort out the broken pieces of pottery that tell anthropologists about the occupation of ancient inhabited sites.

A statistical analysis of the frequencies of potsherd varieties from an Arizona pueblo was made using a Univac computer, Drs. James A. Brown and Leslie G. Freeman Jr. of the University of Chicago reported to the American Anthropological Association in Chicago.

As a result four pottery types were discovered, four different kinds of rooms were isolated, a probable ceremonial complex of five pottery types was found and an area for the disposal of broken pottery was located.

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New Japanese Religion

➤ **AMONG NEW** religions that have arisen in Japan since the end of World War II, one of them emphasizes rituals and ceremonies and aims at the attainment of practical goals, Dr. Felix Moos of the University of Kansas told the American Anthropological Association in Chicago.

The new religion, Soka Gakkai, which means the "Creation Academic Society," aims at the cure of diseases and the achievement of business prosperity. This Buddhist offshoot is welcomed, because of its practical promises, by the financially hard-pressed individuals of the lower classes, Dr. Moos explained.

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Study Climate Effects

➤ **MANY PERSONS** believe that people who live in cold climates are industrious and those who live in warm climates are lazy.

Such statements need anthropological investigation, Dr. Margaret Mead, author and anthropologist of the American Museum of Natural History of New York, told the American Anthropological Association in Chicago.

In the early development of a theory of culture the relationship between such factors as climate, race, language and physical type were investigated. Now, Dr. Mead suggests that more complex comparisons need inquiry.

There should be comparisons of the effects of climatic variations within a single culture. A study of the proportions and locations of constitutional types within societies would determine whether the older idea of a given type of culture being related to a given constitutional type is true.

There should also be examined, Dr. Mead said, the effects of the use of different languages within the same culture or a study of different cultures which share the same language.

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Liquid *synthetics* have been developed that can be solidified in molds to produce rubber soles, industrial tires, wheels, motor mounts, gaskets and other products.