

Current U.S. Patents

► A METHOD of preparing polio vaccine so that it will not be contaminated with cancer-causing viruses was granted a patent by the U.S. Patent Office.

Patent 3,255,081 was awarded to Jerzy Barski of Paris, who assigned rights to the French Government through the National Center for Scientific Research, also of Paris.

It is known that certain antiviral vaccines, such as antipoliomyelitis vaccines, can be contaminated by cancer-causing viruses, Mr. Barski notes. He developed a method to reduce as much as possible the risks of contamination by any kind of viral factor likely to be present in the cultures in which polio vaccines are grown.

This is accomplished by adding to the cultures antibodies effective against the likely viruses, such as simian virus 40, without affecting the antipolio virus.

Mr. Barski states that once cancer-causing virus has been neutralized by the added antibodies, it will not be released again even when taken orally so that it is then exposed to the enzymes in the digestive tract.

Postage Metering System

Trips to the U.S. Post Office with postage meters and checks to have the automatic machines adjusted to meter the amount purchased will be a thing of the past if a system just patented is widely adopted.

Luther G. Simjian of Greenwich, Conn., has developed a remotely controlled postage metering system for which he received patent 3,255,439, rights being assigned to General Research, Inc., also of Greenwich.

Using his system, the postage meters would be connected by standard telephone circuits to a central station, where records concerning individual users could be maintained by electronic computers. Deposits would still have to be made to cover the estimated postage for a specific time period in advance, but the time-consuming chore of carrying the meter to the Post Office for adjustment to the value of each new deposit would be eliminated.

Surfboard Booster

Just in time for the summer surfing enthusiasts is the propulsion device developed by Clive H. Bramson of Oyster Bay, N.Y. In patent 3,254,622 he describes the method he

found to make use of the water on which the surfboard rides to help skim over the surface.

As modified by Mr. Bramson, the surfboard is propelled by taking in water from a wave at its crest, then expelling this water after the crest has passed to obtain added speed. The user shifts his weight to balance the buoyant device.

Other Interesting Patents

Three patents covering methods of heating a home with solar radiation were granted to Harry E. Thomason of District Heights, Md. They cover a combination heat trap and heat dissipator, an apparatus for storing heat and a solar-heated home. The three, 3,254,701, 702 and 703, are among the many the Thomason family have received for devising methods of using the sun's heat to warm dwellings, including tents.

Patent 3,255,433 on what is reported to be the most accurate "clock" in the world was granted to Dr. Norman F. Ramsey of Belmont, Mass., and Dr. Daniel Kleppner of Cambridge, Mass. The atomic hydrogen maser built at Harvard University in 1961 was then the best clock available. It is accurate to two parts in 100 billion at the natural frequency of the hydrogen atom, which is 1420.405 megacycles per second. This 21-centimeter radiation is the wavelength at which the great clouds of hydrogen in and between the galaxies broadcast signals that give scientists solid clues to the distribution and motions of the most abundant substance in the universe.

A cooling arrangement for maintaining equipment in space vehicles at temperatures near absolute zero, which is 459.7 degrees below zero F., earned patent 3,253,423 for David Sonnabend of Menlo Park, Calif. He assigned rights to Philco Corporation, Philadelphia, for the deep-chill system, which has no moving parts but uses instead a metallic heat-conducting wire to transfer heat from the device to be cooled to a heat sink on the satellite's surface.

For a list of patent attorneys and agents and other Patent Office information, write the Commissioner of Patents, Washington, D.C. 20231, or call 202-967-4058.

• Science News, 89:519 June 25, 1966

FREE CATALOGUES OF SCIENCE BOOKS

State your interest! Mathematics, physics, history of science, general science, biology, social sciences, earth sciences, chemistry, languages, philosophy, engineering. Dover publishes over 100 books per year; quality production standards, priced for your budget. Dept. SNL, DOVER, 180 Varick St., New York, N. Y. 10014.



Candle Glow from the Fire can truly light the world and universe

Paulsen Nursery is a 100 page book prepared through years of basic research. This book with descriptive drawings is written specifically regarding Environment Science and Physical Research as applied to life. Discusses activity, health, strength and energy through the control of the 90 elements in soil, plants and food. Features the how and why of greater crop yields. Has lifetime value. Specially priced at \$5.00 postpaid. Write Charles Paulsen, Heartwell, Nebraska 68945, Est. 1893 - Ref. 1st National Bank, Minden, Nebr.

Nature Note

Crambe

► BECAUSE of an immigrant oil-seed plant called crambe, an award was given.

This relative of cabbage and mustard from the sunny shores of the Mediterranean Sea is now being successfully grown as a new crop in the United States. The U.S. Department of Agriculture superior service award was presented this spring to the team of scientists who worked for six years preparing the plant for American soil and commerce.

For the first time, crambe seed oil and meal were processed and marketed in this country last fall. Farmers had produced more than one million pounds of the useful seed.

Crambe abyssinica is a member of the Crucifera or mustard family—a group of plants generally characterized by four petals of each flower growing opposite each other in the shape of the cross. This is a large family of pungent and acid, but not poisonous, plants that are used as food for humans and animals, and as lubricants in industry.

The family includes such familiar vegetables as turnips, radishes, rutabagas, watercress and mustards.

• Science News, 89:519 June 25, 1966



With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

CONTENTS INCLUDE:

Observing the sun, moon, planets and wonders of the sky • Constellation map • Hints for observers • Glossary of telescope terms • How to choose a telescope • Astrophotography

UNITRON

INSTRUMENT COMPANY • TELESCOPE SALES DIV.
66 NEEDHAM ST., NEWTON HIGHLANDS 61, MASS.

Please rush to me, FREE of charge,
UNITRON'S OBSERVER'S GUIDE and TELESCOPE
CATALOG # 5-W

Name _____
Street _____
City _____ State _____