

INVENTION

Patents of the Week

► A CONVERTIBLE stadium with a playing field that changes shape for different sports, and a convertible auditorium that can be quickly turned into two separate auditoriums, have been patented.

John W. Waterbury of Irvington, N.Y., was awarded patent No. 3,002,234 for the stadium, which features a movable seating section with the outer edge supported by wheels that can be rolled along a circular track. Shifting this section back and forth makes the playing field either rectangular, for such sports as football, soccer and lacrosse, or pie-shaped, for baseball.

Rights were assigned to Praeger-Kavanagh-Waterbury, New York City.

The auditorium concept won patent No. 3,002,233 for Gyo Obata, Webster Groves, Mo., with rights assigned to Hellmuth, Obata & Kassabaum, Inc., St. Louis.

The hexagonal (six-sided) structure is divided in the center by two triangular platform areas, suitable for stages or pulpits. A movable wall, raised hydraulically from a well in the floor, "splits" the building into a pair of five-sided assembly halls, leaving one platform and one seating area in each of the two subchambers.

One of the subchambers would have seats that could be turned to face the other platform area when the full-sized auditorium has a large audience.

Patent No. 3,002,838 went to Patrick L. Hughes, Lakeland, Fla., and Jonathan B. McKay, Bascom, Ohio, for a process to produce high-protein stock feed from low-grade citrus fruit, including its seeds and peelings. Rights were assigned to Gavin D. McKay, De Kalb, Ga.

The pulp and the liquid are separated, and the liquid portion is fermented and evaporated to produce an enriched molasses. The shredded pulp and the molasses are then mixed and dried to form the feed, which can be treated with ultraviolet rays to add ergosterol, a nutritious vitamin. Propagation of yeast during the fermentation process makes the ultraviolet treatment possible, the inventors claim.

Automation comes to the hen house in an invention that won patent No. 3,002,494 for Loren C. Murray of rural Elkhart, Ind. Eggs laid by hens in a row of cages fall from a sloping floor onto a conveyor belt that takes them to a curved chute, where they roll slowly down to another belt that takes them to a common gathering point.

Inventor Alfred T. Dube of rural Waterbury, Conn., was awarded patent No. 3,002,484 for a boat he calls "practically impossible to capsize" and sink-proof even if it should capsize.

A long pontoon is linked to each side of a small or medium-sized boat. In addition to providing smoothness, stability and additional safety in rough water, the pontoons also serve as an auxiliary power source. Each pontoon contains a hydraulic motor operating a propeller. The pontoon motors will power the boat if the main motor fails.

An explosion-proof plug for containers

holding highly volatile liquids was given patent No. 3,002,648, awarded to Glenn T. Rieke of Rieke Metal Products Corporation, Auburn, Ind.

The plug's valve structure is designed to relieve internal pressure within the container under abnormal temperatures, preventing it from reaching an explosive level. A compressed spring holds the valve in a closed position against a predetermined maximum pressure.

A shoe-scraping bar with brushes mounted on each side permits cleaning muddy shoes prior to entering the house, without having to stand on one leg, stoop, or perform other gymnastic feats, according to inventor Paul G. Mathes, Quincy, Ill. He received patent No. 3,002,211 and assigned rights to Trio Manufacturing Co., Griggsville, Ill.

Squares of ground meat are shaped into spherical meat balls in a hand-cranked device for which George A. Rikhoff of rural Pueblo, Colo., was awarded patent No. 3,002,220.

A toy rocket ship invented by Allen G. Roth, Indianapolis, Ind., is big enough to hold two small passengers. The fiberboard craft gives the feel of space travel by picture displays that show the world as it would appear during take-off, then from the stratosphere and from outer space. Rights to patent No. 3,002,752 were assigned to Lester Matheson, Indianapolis.

• Science News Letter, 80:279 October 21, 1961

ROENTGENOLOGY

Cooling Skin Reduces Radiation Damage

► BY COOLING the areas of skin through which radiation passes, skin damage from X-rays and other radiation used in the treatment of cervical cancer can be materially reduced, Drs. Edwin J. Liebnner, Walter S. Moos, Martin Hochhauser and Roger A. Harvey, University of Illinois in Chicago, told the American Roentgen Ray Society in Miami, Fla. Cool water is circulated over the skin reducing its temperature during the few minutes of radiation treatment.

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Questions

PUBLIC HEALTH—What six diseases have decreased in Latin America? p. 269.

SPACE—By what method can life on Mars be detected? p. 267.

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