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INVENTION

Patents of the Week

A device that controls the flooding of an underwater missile tube after the missile has been launched, such as might be found on the Polaris submarine, received a patent.

➤ A DEVICE that controls the flooding of an underwater missile launching tube was patented by the U.S. Patent Office. While its use is a Navy secret, it is believed it could be used on Polaris-carrying submarines.

The apparatus is used on vertical launching tubes and controls the amount of water that enters the tube after a missile is launched underwater. This device also enables the submarine to maintain weight stability before and after the launching, regardless of the size of the missile or the tube from which it was launched.

The flood control device, which received patent 3,100,421, assigned to the U.S. Navy, was invented by Tsoy K. Moy of Santa Clara, Calif.

It includes a valve assembly that controls the post-launch flooding and allows only the amount of water equal to the weight of the missile to enter the tube. If a lightweight missile is launched, only a small amount of water can enter the tube, and thus the stability and maneuverability of the ship is not displaced.

Stone-Picking Implement

Two Canadian inventors have devised a stone-picking machine that is towed behind another vehicle to clear fields for plowing and planting. The multi-pronged fork is operated hydraulically to scoop up the stones and then to tilt backwards dumping the stones in a bucket.

Another lever dumps the stones in piles on the ground after all have been gathered. U.S. patent 3,100,540 was issued to Lloyd C. Deaver and Charles G. Deaver of Kenaston, Saskatchewan.

Ultrasonic Gauge

A gauge that is attached outside of a tank containing radioactive liquids, acids and perhaps liquid oxygen and hydrogen, measuring the volume of these substances by "listening," received patent 3,100,885.

The device measures ultrasonic waves bounced off the surface of the contents and can automatically correct itself in case the temperature or density of the substance changes suddenly.

Rights to the patent were assigned by Walter Welkowitz of Nixon, N. J., and

Hugo E. Dahlke of Jenkintown, Pa., to Gulton Industries, Inc., Metuchen, N. J.

Log Debarker Feed Apparatus

A Georgia inventor has developed a machine to aid the lumber industry. It receives logs of all shapes, sizes and contours, loosens the bark, feeds the logs into the body of a machine that strips the bark, and then delivers the debarked log to a nearby yard.

The device, which received patent 3,100,514, was invented by Edward Dechau Jr. of Waynesboro, Ga.

Other Significant Patents

Other patents include:

An educational globe with a transparent hemispherical overlay, enabling the user to study satellite orbits, astronomical, geographical and navigational problems in relation to the earth. The globe, which is already commercially available, was invented by Wellman Chamberlin of Waterford, Va., who assigned rights to patent 3,100,353 to the National Geographic Society, Washington, D. C.

A corncob cigarette, ancient tobacco substitute, for which William C. Schmidt of Indianapolis, Ind., received patent 3,100,492. Using grated or ground corncob eliminates the presence of nicotine.

A cleat cleaner, designed for cleaning athletic shoes, which was invented by William H. Williams of Silver Spring, Md., and granted patent 3,100,312. It consists of a mat with many projections to fit between the cleats. It can be placed near an athletic field so that a player may quickly remove mud from his cleats without removing his shoes.

An alcoholic beverage, fermented from naturally occurring honey and gently-agitated yeast cells to retain the original fragrance of the honey, for which Stuart L. Adams, Anchorage, Ky., and George V. Niesen, Louisville, Ky., earned patent 3,100,706. Rights were assigned to Joseph E. Seagram & Sons, Inc., New York.

An anti-slip device consisting of sanded rubber cemented to an untreated layer of felt and attached to the sole of a boot or overshoe, for which Joseph J. Jordan and Ralph Palermo, both of Point Marion, Pa., received patent 3,099,885.

• Science News Letter, 84:142 Aug. 31, 1963