INVENTION

## Patents of the Week

A method for safely producing pure cultures of microorganisms by means of a new drain valve and device, giving better control of fermentation, won patent for eight co-workers.

➤ A SAFE WAY to produce pure cultures not only for bacteriological warfare but for peaceful research to develop vaccines and toxins earned patent 3,075,888 for eight Government employees.

The invention of this group means that researchers have gained much better control of bacteriological fermentation using a novel drain valve and aeration device, and a new process of aeration and agitation. These devices give a method of safely producing pure cultures of microorganisms without danger to the environment or to the organism.

The Chemical Bacteriological Radiological Agency, Ft. Detrick, Md., regards the invention so highly that it is installing the devices in all new pilot plants and labora-

Award of the patent terminates a long period of research by these Civil Service employees: Glenwood B. Achorn, Jr., Arsenal, Ark.; John Schwab, Birmingham, Mich.; Samuel Metcalfe Jr., New Windsor, Md.; James R. E. Smith, Elmer Bokesch, Edward Dapper, Behert Lebberg, and Edward Dapper, Robert Lebherz and Arthur J. Rawson, all of Frederick, Md.

#### Recoverable Launch Vehicle

A test-launch vehicle that can be shot from submerged submarines and recovered earned patents 3,075,301 and 3,075,302 for Willy A. Fiedler, Los Altos, Calif., and Joseph E. Madden, Mountain View, Calif. The Navy is assigned patent rights.

The inventors developed a test vehicle that simulates an actual missile by having the same weight, center of gravity, pitch and yaw moments of inertia and external configurations of the propulsive missile being simulated.

However, the vehicle weighs only a small part of a tactical missile launched from underwater. Its kinetic energy quickly cuts back to zero after it has pierced the surface of the water. The vehicle immediately falls back into the water from a low height and is decelerated to rest by drag and buoyant

#### **Rocking Attachment for Cribs**

A rocking attachment for cribs or other objects earned patent 3,075,205 for Samuel W. Canova, Totowa, N. J.

An electric motor fits directly under the center of the crib at the point where the two lengthwise supporting bars cross each other, diagonally. The motor, easily disconnected and assembled, does not require a skilled mechanic for installation.

#### **Automatic Dishwasher and Table**

An automatic table that makes it possible for one meal to be served right after another without the dirty dishes having to be wrestled with, or washed by hand, won patent 3,075,215 for Edward Marque, Northridge, Calif.

The table provides four eating places, via trays. Each tray is mounted so that it can be washed by being rotated 180 degrees to be exposed to the scouring brushes and other equipment in the proper places below.

Eating utensils are kept attached to the revolving trays by magnets.

#### **Underwater Talking Device**

Kept secret by the Navy for almost four years, patent 3,076,174 represents a novel way for underwater swimmers to "converse," at least in part.

The breathing mask has a large enough area about the mouth so that the swimmer can speak and shout, but the swimmers must be close to each other. The sounds carry from one breathing air valve to the

#### Other Patents

Other significant patents include:

A method of dry construction, without mortar, for which patent 3,076,293 was awarded to Edmund Baudoux, Geneva, Switzerland. Rights were assigned to Etablissement Dic, Vaduz, a corporation of Liechtenstein.

A portable blind for hunters and soldiers, for which Adolph King was granted patent 3,075,252. Rights were assigned to King Industries, McKenzie, Tenn.

A portable beach tent of a flaring semicircular design that can be adjusted to changing wind conditions, for which George B. D. Parker earned patent 3,075,536.

Science News Letter, 83:127 February 23, 1963

East Africa is a major breeding area for the desert locust, a migratory grasshopper slightly larger than species found in the U.S.

# CHANGING

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