

## INVENTION

# Patents of the Week

► A METHOD of producing weightlessness by whirling an astronaut around a circular track, then hurling him up a vertical one has been patented.

The track must be built near a cliff or very steep mountain about 4,000 feet high in order to have enough length to produce weightlessness. Charles L. Barker Jr. developed the space flight simulator while working at Huntsville, Ala. He assigned rights to patent 3,041,741 to the Government through the Secretary of the Army.

The accelerating vehicle can be powered either by rocket or turbo-jet. When a speed of 200 miles an hour is reached on the circular track, the switch connection to the vertical track is closed and the vehicle is shot upward.

During the upward and downward flight, the vehicle remains weightless for a total of 30 seconds. It is slowed down upon return by jet units usually used to assist airplanes taking off.

An instructor can ride in the vehicle with the astronaut, or a television monitoring system can be used to record the trainee's reactions.

## Steam-Spray Iron

An iron that can be used as a dry, steam or spray iron for clothes won two patents. Harold S. Foster of Ontario, Calif., assigned rights to patent 3,041,756 and, with Alfred G. Swenson, also of Ontario, to patent 3,041,757 to General Electric Company.

The kind of iron—steam, spray or dry—is controlled by a button at the front end of the handle, and the ironing temperature is controlled by a dial. The spray is finely divided and is claimed to eliminate the need for hand sprinkling.

## Other Significant Patents

Other interesting patents include:

A device to analyze and synthesize human speech, using an electrical analogue of the human vocal tract. Patent 3,042,748 was granted to George Rosen of Philadelphia, Pa., who assigned rights to the Government through the U.S. Air Force.

A low-drag submarine so designed that most of the vehicle is traveling in a vapor bubble, for which John G. Lee, Farmington, Conn., won patent 3,041,992. Rights were assigned to United Aircraft Corporation, East Hartford, Conn.

An automatic machine that accepts checks or money and issues a receipt in return for the deposit, several of which installed in a bank could relieve a teller of some of his duties. Luther G. Simjian of Greenwich, Conn., assigned rights to patent 3,042,919 to Universal Match Corporation, Ferguson, Mo.

An improved method of lighting a sky chart for identifying the stars and planets in the night sky. Patent 3,041,742 to Daniel T. Meisenheimer, Milford, Conn., and Louis W. Syarto, Fairfield, Conn., who assigned rights to A. C. Gilbert Company, New Haven, Conn.

A music box operated by a bird when it perches on the activating support. A mirror near the perching rod is supposed to make the bird compete with the musical or song bird sounds coming from the box. Patent 3,041,911 to Michael Marder of New York.

Cord holder attachment for electrical outlets, eliminating the hazard and messy look of long cords not in use. The attachment is fastened to the face plate of the electrical outlet, the extra cord being wound around a spool portion hidden from view. Patent 3,042,739 to Burnie M. Craig, Pasadena, Calif., who assigned rights to Henry Keck Associates, South Pasadena, Calif.

A portable teepee that can be easily assembled or taken apart and in which a fire can be built, for which James S. Des Rosier of Butte, Mont., won patent 3,042,052.

A device for reducing the amount of water used in flushing toilets, for which Richard Wendell Williams of East McKeesport, Pa., was awarded patent 3,041,630.

• Science News Letter, 82:47 July 21, 1962

## Questions

ASTRONOMY—How bright is a supernova?  
p. 40.

OCEANOGRAPHY—What is a "cubmarine"?  
p. 40.

SPACE—What kind of a satellite is Telstar?  
p. 37.

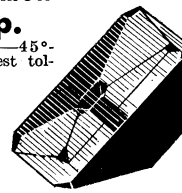
Photographs: Cover, Science Service; p. 35, Dr. John P. Gallagher; pp. 37 and 38, National Aeronautics and Space Administration; p. 42, U. S. Patent Office; p. 44, New York State College of Agriculture; p. 46, University of California, Berkeley; p. 48 (top), Kaymar Photographers; p. 48 (bottom), U. S. Fish and Wildlife Service.

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