

INVENTION

Patents of the Week

A device that duplicates a space flight from take-off to landing and is expected to help select the best crew for flights into space earned a patent.

► A SPACE TRAINER that can completely duplicate a space flight from take-off to landing earned patent 3,083,473 for William B. Luton of Dallas, Texas, from the U. S. Patent Office.

The device reproduces the circumstances of an entire mission, for a one-man orbital vehicle to a three-man spaceship. It includes close loop control, navigation, and all the essential psychological and physiological stimuli. The last include vibration, noise, heat, pressure, atmospheric mixture, lighting, an "earth horizon" and varying acceleration.

The invention is expected to insure that the best crew is selected for space flights.

The space flight simulator contains a system that duplicates the roll, yaw and pitch motions. Patent rights were assigned to Ling-Temco-Vought, Inc., Dallas.

Measures Oxygen Tension

A method of determining immediately at the time of surgery whether a bone is dead or alive gained patent 3,083,706 for Charles F. Woodhouse, Chicago, Ill.

The invention calls for drilling a hole through the bone under investigation and removing part of the bone for electrical analysis of the amount of oxygen present. The analysis can immediately tell, at the time of surgery, whether a fractured bone has a blood supply and is alive.

New Airplane Design

Constructing an airplane so that the resistance of the wings to air flow is substantially reduced and providing for isolating the fuel compartments from the passenger area earned patent 3,082,981 for Henry Gruen, Washington, D. C.

Mr. Gruen claims four advantages for his invention: reduction of fire danger to the fuselage in crash landings; reduction of drag; reduction of surplus fuel load by about 25,000 pounds and a gain in fuel economy.

Another departure from the conventional airplane is in the skeleton construction of the wings. A series of "eye" beams are attached to the fuselage. Their ends are bolted by backing plates to insure that the wings do not separate from the aircraft.

Other Patents

Other U.S. patents granted include:

A device for installing soil drainage, which gained patent 3,083,542 for Samuel D. Summers, Fowler, Ohio, and Floyd K. Summers, Farmdale, Ohio.

A portable electric cooker, which earned patent 3,083,450 for Louis A. Harvey, Detroit, Mich.

An earth-conditioning and seeding trailer, which gained patent 3,083,652 for Henry J. Brettrager and Joseph F. McDonald, Saginaw, Mich.

A method of stabilizing vessels using anti-rolling compartments or tanks, which gained patent 3,083,671 for Kenneth Clay Ripley, Washington, D. C., who assigned rights to John J. McMullen Associates, Inc., New York.

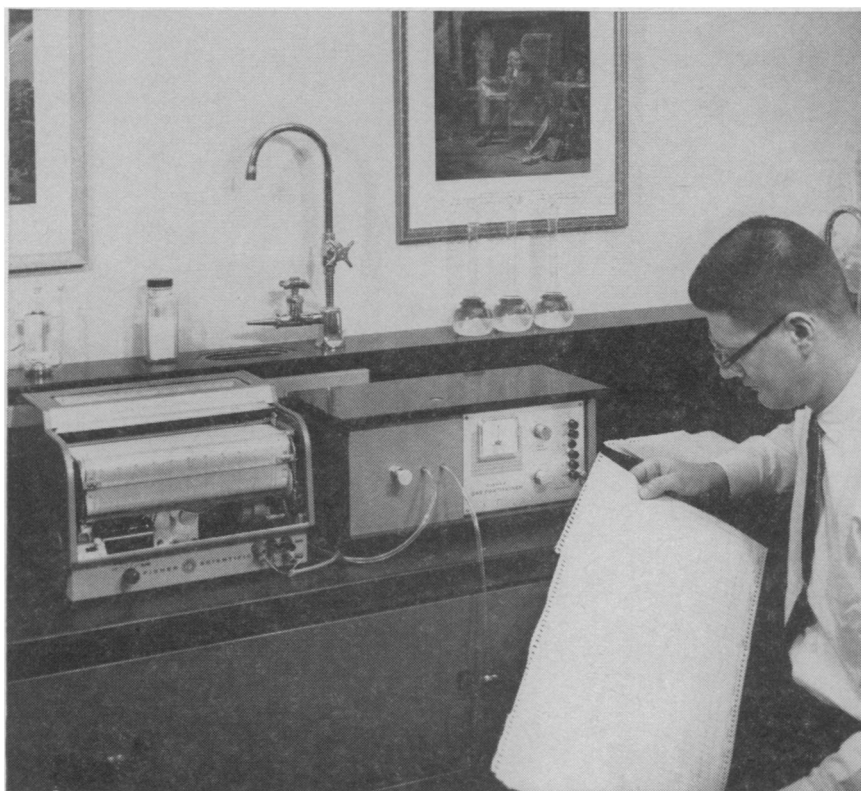
An invention for coding information by using a binary code, particularly an addition or subtraction device, for which Oskar Vierling and Wolfgang Peuser, Ebermannstadt, and Rudolf Roseler and Otto Schulz, Darmstadt, Germany, were awarded patent 3,083,897.

• Science News Letter, 83:253 April 20, 1963

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