

INVENTION

Patents of the Week

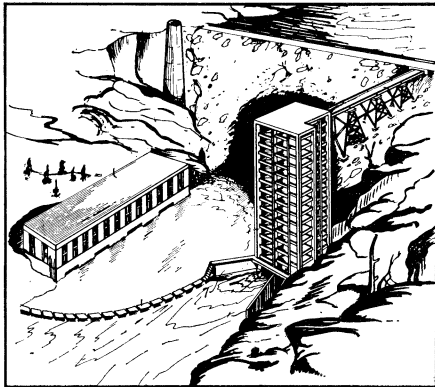
A chemical spray for higher fruit production of apple-trees, a water "staircase" for easier salmon migration over dams and a beacon for airplane rescues have been patented.

► A CHEMICAL SPRAY patented in Washington causes apple trees to yield a large amount of fruit each year instead of every other year.

Normally, such apple trees as Baldwin, Cortland or Golden Delicious have an "on" and "off" year, producing more fruit one year and more leaves the next.

Robert H. Beatty of Philadelphia, in U.S. patent No. 2,978,838 assigned to Amchem Products, Inc. of Ambler, Pa., claims that solutions of various derivatives of trichlorobenzoic acid, sprayed on the apple trees when the fruit buds bloom during the "on" year, produces annual instead of biennial bearing.

The inventor said that if the chemicals were applied to fruit trees during a certain period in a tree's growth, "the growth is so altered that fruit buds are formed where one would normally expect to find vegetative buds." Previous methods of thinning fruit trees by hand or by chemical means have, in general, proved unsatisfactory, the patent claims.



SALMON STAIRCASE

A spiral water "staircase" for salmon hurdling over dams during their migration upstream to spawn received another patent. The invention of James M. Wardle of Ottawa, Ontario, Canada, won patent No. 2,978,873. Rights were assigned to Northwest Power Industries Limited, Ottawa. A series of steps, or pools, provide a passage-way for both the spawning salmon and their returning fingerlings, with every 12th pool designed as a stop-over, or resting place.

A ventilating and cooling system for automobile seats provides relief during warm months. Invented by Wesley F. Hake of Terre Haute, Ind., the system was awarded patent No. 2,978,972. An air scoop gathers up the air, and ducts circulate the air throughout the seats.

A better way to hold dental plates in place in a person's mouth is promised by

Murray W. Rosenthal of New Brunswick, N. J., and Herbert A. Cohen of Brooklyn, N. Y., in patent No. 2,978,812, assigned to Block Drug Company, Inc. of Delaware. The fixative, which contains an ethylene oxide polymer, comes as a powder, film or paste that may be easily applied to the dental plates.

A portable beacon that guides rescue parties to an airplane crash by the distress signals it gives off won patent No. 2,979,608 for Janis Alfreds Siron of Springfield, Ohio, who assigned the patent to the U. S. Army. The beacon transmits both high frequency signals for ground, automatic direction-finding networks, and ultra high frequency signals for air-borne equipment that pinpoints the crash area. The device is automatically ejected from an airplane hitting an obstacle and parachutes to the ground. The set begins broadcasting automatically on impact with the ground.

A chemical spray that prevents early blight disease on tomato plants has been patented by Arthur Lawrence Fox of Greenwood, Va., and Irving Joseph Krems of Vienna, Austria. Rights to patent No. 2,979,436 were assigned to Colgate-Palmolive Company of New York. The spray contains a metal salt (alkyl benzene sulfonate) that maintains a high resistance to the blight disease even after a heavy rainfall, the patent claims.

An improved "multi-stage flash evaporator" for de-salting the oceans is the subject of patent No. 2,979,443, granted to Adolf Frankel of Gosforth, Newcastle-on-Tyne, England, who assigned the patent rights to Richardsons, Westgarth & Co. Limited, of Northumberland, England. Most of the pure water that is distilled is siphoned off, but some of the water that is not so pure is recirculated to a boiler for re-use, according to the inventor.

An intravenous method of administering drugs for relaxing muscles during surgical operations was patented by Edwin J. de Beer of Tuckahoe, Charles H. Ellis of Scarsdale, and Walter Ide of Eastchester, N. Y. Awarded patent No. 2,979,055, assigned to Burroughs Wellcome & Co. (U.S.A.) Inc. of Tuckahoe, N. Y., a small electric current is periodically sent through a muscle pierced by an intravenous needle. Each time the muscle contracts, it absorbs some of the drug.

A long handled, portable "scoop" for gathering leaves and trash without doing much stooping over was awarded patent No. 2,978,731 for Fred V. Belluomini of Jackson, Calif. The scoop opening is automatically clanged shut by a grate when not in use to prevent leaves or trash from blowing away.

• Science News Letter, 79:271 April 29, 1961



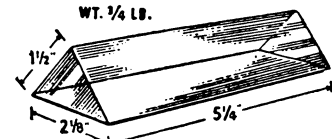
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