·New Machines and Gadgets ·

SEEECTRIC HEATER, to keep drinking trough for cattle free of ice during freezing weather, is a hollow metal disk encircled by a heating element similar to those on electric stoves. A cable attaches it to the barn lighting current. It will neither shock nor burn a cow's nose. Science News Letter, November 10, 1945

SPECIAL BURNER, developed to disperse fog on airfields, uses Diesel oil instead of aviation gasoline as used in the English system, the first airfield fog dispersal scheme devised. Burner operation is regulated electrically from the control tower.

Science News Letter, November 10, 1945

SMALL SCREW JACK operated by electric motor is used on heavy aircraft to raise and lower the horizontal stabilizers. It replaces the cable arrangement between trim-tabs on the trailing edges of elevator surfaces and the pilot. The assembly, complete with motor, weighs 22 pounds.

Science News Letter, November 10, 1945

TINY dry battery cells, 36 of which weigh a pound, provide as much service, cell for cell, as standard flashlight cells. The core of each is rolled zinc and paper tape, specially impregnated, plus a mixture of mercuric oxide and carbon. A surrounding steel jacket serves as the positive terminal.

Science News Letter, November 10, 1945

ACID-FILLED vial, or glass ampoule, is a basic part of a new type fuse



for shells used by anti-aircraft guns. Its actual construction and operation is still a military secret. As shown in the picture, the ampoule is about the size of an ordinary Christmas tree lamp.

Science News Letter, November 10, 1945

PRESSURE-PROOF camera and equipment, that can be used 225 feet under water to photograph sunken ships and other objects, is an electrically-operated multiple exposure instrument and can be operated from the surface by remote control. It uses standard film, filters and flashbulbs.

Science News Letter, November 10, 1945

NEW DEVICE, called a ram pacer, is attached to a standard hydraulic testing machine used to test metals, plastics and wood where loads must be applied at exact speeds. It gives exact control at one of eight pre-set speeds by gear changes on a synchronous motor drive unit.

Science News Letter, November 10, 1945

ELECTRICAL device to correlate fluctuations in light intensity and time in making exposures for photo engravings goes by the trade name of Totalux. An ultraviolet sensitive photo tube, which passes current proportional to the intensity of the light, is the heart of the instrument.

Science News Letter, November 10, 1945

If you want more information on the new things described here, send a three-cent stamp to Science News Letter, 1719 N St., N. W., Washington 6, D. C., and ask for Gadget Bulletin 284.

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