

• New Ideas and Gadgets •

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⚙️ **DESOLDERING TOOL** for printed circuit board repair vacuums away the solder it melts. Its solder-resistant tip prevents the solder from sticking and clogging the opening of the tip. The tool, manipulated with one hand, is held like a pencil, giving the operator control and visibility while working. A rubber bulb attached to the instrument is used to discharge the molten solder as it collects.

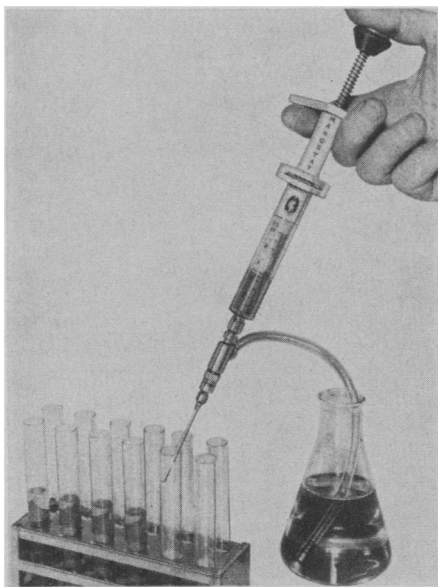
• Science News Letter, 88:240 October 9, 1965

⚙️ **ELECTRIC PIZZA WARMER** is designed especially for keeping pizzas hot. Useful for patio serving as well as barbecues, the tray can also be used for warming pies, canapes, rolls, buns or biscuits. The warmer, 16 inches in diameter, heats up quickly over its entire surface. The walnut handles of the chrome-plated tray remain cool throughout its operation.

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⚙️ **CENTRIFUGE BOTTLE** withstands centrifugal forces up to 15,000 G's. Available with an autoclavable polypropylene screw cap and non-sticking rubber adapter to fit standard centrifuge rotors, the bottle permits safe handling of infectious materials. The round-bottomed bottles do not leak, crack or warp in operation and are resistant to corrosion and scratching.

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⚙️ **AUTOMATIC LABORATORY DISPENSER**, shown in photograph, is a syringe type unit made of non-freezing and non-sticking plastic for measuring and dispensing exact quantities of liquid substances. Easy to operate, the user simply pushes the plunger to dispense a solution and releases

it to fill the syringe through a tube leading to the source of the material. The transparent syringe barrel has a capacity of 0.2 to 10 cc.

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⚙️ **RECORD HOLDER** allows a person to handle phonograph records without touching them with his fingers. The device, a leatherette disk, folds in two over the edge of the record as it is grasped. About 2½ inches in diameter, the reusable holder is felt flocked and will not scratch the record.

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⚙️ **DESK PEN SET** for office or den is a versatile unit with a thermometer base that can also serve as a paperweight. The thermometer, readable at a glance, is made with gold numbers on a white face. The set is available with a black or white base.

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⚙️ **CAR WAXER AND POLISHER** makes car waxing and polishing quick and easy. The electric unit plugs into the cigarette lighter socket and its soft brush does the rubbing and the hard work while the user just holds the handle. Provided with a long handle and an extra-long cord, the waxer reaches every part of the car.

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• Doctors Are Reading •

Heat Kills Cancer Cells

► **TWENTY YOUNG ADULT** cancer patients in East Germany had their body temperatures raised to 111 degrees F. for 30 to 45 minutes. About 95% of the malignant cells were killed as a result of this procedure, Dr. Manfred von Ardenne, a physicist, has reported.

The patients' heads were cooled to maintain brain temperatures of about 104 degrees F.

The heat treatment is not meant as a replacement for surgery or drugs, stated Dr. von Ardenne, and in fact is best used immediately after the primary tumor has been surgically removed. Subsequent heat treatments will then keep the growth of cancer cells under control.

Critics of the treatment raise two arguments. Heat can kill normal cells, and it is possible that the cancer cells may become resistant to periodic heat therapy.

Dr. von Ardenne seems to have overcome the problem of normal cell destruction, however.

After the heat treatment, anticancer drugs will become more effective, he said in *Medical World News* 6:60, 1965.

Ineffective Coil Is Harmless

A 26-year-old woman was reported to have given birth to a healthy fifth child despite the fact she had been using a Lippes loop, a type of intrauterine contraceptive.

Dr. J. A. D. Clinch of St. David's Hospital, Cardiff, Wales, reported the case in the *British Medical Journal*, Sept. 25, 1965,

illustrating that even if a woman does become pregnant, the device does not harm either mother or baby. The child was born normally.

Filter to Reduce Polonium in Cigarettes

An experimental filter to remove polonium, a radioactive metal thought to be a possible cause of lung cancer, from cigarette smoke is being developed in Wellington, New Zealand.

Such a filter, says eminent New Zealand physicist Sir Ernest Marsden, coupled with the use of tobacco of low radioactivity, could lead to a considerable reduction in the possible hazards of cigarette smoking. Reporting in the *New Zealand Medical Journal*, Sir Ernest stated that he has found strong evidence that radioactive substances, particularly polonium, in some tobaccos may be responsible for lung cancer. The same substances can enter the lungs, under certain circumstances, in other ways than through smoking.

Certain tobaccos are more radioactive than others. Tobacco grown in New Zealand shows very low levels of radioactivity. The relative incidence of lung cancer in various regions bears a striking relation to the average amount of polonium inhaled from all sources, the scientist reported. Britain, for instance, is the country with the highest incidence of lung cancer. About 35% of tobacco smoked there is Rhodesian, high in radioactivity.

There are at least two other sources of polonium in the atmosphere, the lead compounds used in gasoline and coal-fired power stations where the coal used is radioactive.

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