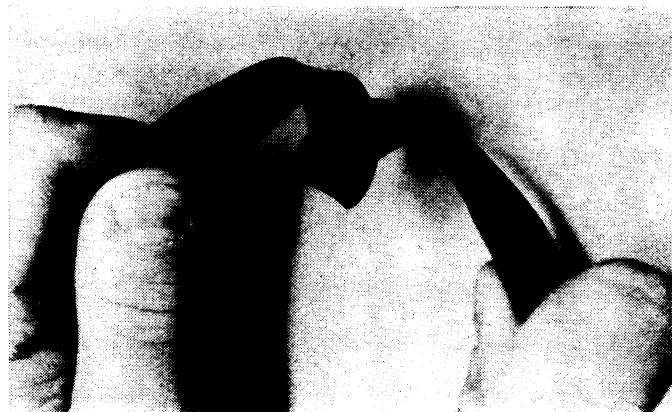


# Current Patents



## Boilable Plastic Patented

A unique method of producing polymer plastics, and one type of plastic made by the new process, were granted U.S. patents 3,306,874 and 3,306,875 last week, Dr. Allan S. Hay, inventor of the new process, assigned the patents to the General Electric Company. GE recently finished a plant in Bethlehem, N.Y., which will produce 10 million pounds of the new plastics a year.

Chief advantages of the plastics produced by Dr. Hay's new method, called oxidative coupling, are wide temperature range performance, excellent electrical insulation properties, and resistance to deterioration by water, acids or steam.

The first commercial plastic produced by the method,

polyphenylene oxide, can be used in temperatures ranging from minus 275 degrees F. to 375 degrees, without cracking or losing its shape. This makes it useful for medical instruments, which have to be sterilized, as well as other hot-spot applications such as hot water pipes and shower-heads, pump valves, and electronic gear.

Polymer plastics are made by linking together relatively small molecules, called monomers, into a long chain making up a single large molecule. Pressure, heat, and sometimes chemical catalysts, are used to join the simple molecules.

These methods were not successful in linking up monomers of phenylene. Dr. Hay discovered, however, that by pumping oxygen into a mixture of phenylene monomers, catalysts and solvents heated to a precise temperature, a phenylene oxide polymer chain could be formed. The resulting polymer molecule has much greater heat resistance and strength than other plastics.

## Transplanting Machine

A machine that makes it possible for commercial growers to use the latest methods of plant growing, such as pots made of peatmoss, and black plastic mulch, received patent No. 3,306,239.

Inventor Wayne Martin Jr. of Hillsboro, Ohio, claims that present tobacco, tomato and cabbage transplanters can't be used to plant through the plastic mulch. His invention, which has a punch to cut through the mulch and drop the plant in the hole, should cut out five-sixths of the cost of using the new techniques, he said.

# New Ideas and Gadgets

New Ideas and Gadgets is an editorial service to readers; more information on items can be secured from the manufacturers.

## Radiation Survey Meter

Compact and portable, this instrument is capable of detecting alpha, beta, gamma, or neutron radiation using 800-900 volt geiger or scintillation probes. Powered by three "D" cell flashlight batteries and weighing only two and a half pounds, the radiation survey meter, which provides 0 to 600, 6,000, 60,000 and 600,000 counts per minute, is suitable for general purpose applications.

Britco Solid State Instrumentation,  
5909 Melrose Ave., Hollywood, Calif. 90038

## Tape Dispenser

The average time required to tape packages is reduced as much as 75 percent by this semi-automatic tape dispensing machine that determines and controls the amount of pressure-sensitive tape required. The unit is suitable for use with various types of cartons and stackable materials, such as plywood and doors up to 18 inches high.

Permacel Division of Johnson and Johnson,  
New Brunswick, N.J.

## Pen-Type Instrument Oiler

A drop or a fraction of a drop as needed can be dispensed through the retractable .035 stainless steel tube of this see-through plastic oiler that has a 9½-inch

reach, and oils around corners and inside mechanism. The pocket-size finger-controlled oiler is sold empty to be filled with the oil of the user's choice. It is suitable also for dispensing solvents and cleaning fluids.

Armit Laboratories,  
1845 Randolph St., Los Angeles 1, Calif.

## Handy Cutting Tool

Fingers become shears with this handy tool for clipping garden flowers or for light pruning. The cutter fits over the thumb and forefinger of either hand by means of flexible rings that adjust to any size fingers. For use, the thumb and fingers are merely pressed together. It is also useful in the kitchen for cutting vegetables such as string beans and celery.

Frank Earnest Co.,  
302 Locust St., Williamsport, Pa. 17701

## Instant Humidity

The humidity of a room can be quickly raised by a push of the button on this aerosol can which releases cool, pure moisture, free of chlorine or minerals. Useful in sick rooms as well as various rooms in the home, the unit also finds application in laboratories, clean rooms and environmental chambers.

Lamb Engineering Associates,  
66 King St., Hillside, N.J. 07205