

• New Machines and Gadgets •

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TOY DISH WASHING SET of unbreakable polyethylene contains a dish pan, dish drainer, silverware holder, silverware tray, dish scraper and garbage receptacle with cover. All are scaled to small size but, nevertheless, provide the means for the little girl to help mother in actual washing of dishes.

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MULTI-PURPOSE BINS of polyethylene may be used individually or stacked in units of two or three. Available in four colors, the bins may be used to store fruits and vegetables, as flower planters, as beds for small animals, as sewing catch-alls or doll cradles, or as portable holders for cleaning supplies.

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FOOD CUTTER may be used to ripple, shred, garnish, waffle, slice and julienne fruits and vegetables. It may also be used to prepare eye-catching garnishes.

Science News Letter, December 26, 1959

TOY DOCTOR KIT consists of a plastic visiting bag containing a variety of toy instruments including an otoscope, a hypodermic syringe and a stethoscope. The kit, shown in the photograph, also includes a



medicine cabinet for the young "physician's" office.

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LIQUID CEDAR for protecting furs and woolens and repelling undesirable odors, is clear and fast penetrating. It can be applied to any bureau drawer or closet with an ordinary paint brush or spray gun. When dry, it is said to leave a lasting protective cedar smell.

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POOL PORTABLE ENCLOSURE of clear plastic permits year-round swimming in an outdoor pool. The inflatable enclosure has no structural members but is air-supported by a small 1/10-horsepower blower. Held in place by water tubes in its base or by sand bags, it can be erected in two hours by two people. Standard sizes up to 40 by 60 feet are available.

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AUTO BRAKE CONTROL is fastened to the front, right floor of the car so that the instructor riding with a beginning driver may stop the car quickly in case of an emergency. It may be quickly installed by a mechanic and, although it operates as surely as the driver's brake pedal, the control is entirely independent of the regular brake.

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OVERHEAD DOOR OPERATOR, especially designed for oversize garage doors, automatically unlocks and opens or closes and locks the door at the push of a button. Equipped with enough lifting force to operate doors up to 10 feet high and 20 feet wide, the unit has a built-in safety feature that stops the door at the slightest interference.

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Nature Ramblings



By HORACE LOFTIN

AS COLD WEATHER sees the rise of colds, sniffles and 'flu across the nation, over and over again the blame will be placed on "the bug" or "the virus."

It was not many years ago that we first learned of the existence of these viruses, sub-microscopic organisms that appear to be about as much mineral as animal. It is still something of an open question whether or not viruses are living creatures. In common with plants and animals, they appear to reproduce—but only in the presence of a plant or animal cell. They seem to "take over" the protein-manufacturing processes of the infected cell, making it produce more viruses.

Like non-living chemical substances, some viruses have been converted in the laboratory to crystals. These crystals can then become infective viruses.

Considerable research is being centered on the viruses, especially on their role as agents of human and animal diseases. polio, for example, is a virus disease, as is

Plants and Viruses



influenza and a host of other human ailments. In other human diseases of unknown origin, a virus is the chief suspect. These are under constant study in the laboratory.

Less well-known is the vast amount of research effort being poured into the study of plant virus diseases. Viruses attack and destroy or lessen the yield of a great number of our farm crops. They cause loss of costly ornamentals and ruin shade trees. Research centers are probing the secrets of plant viruses. Many a potted plant in university greenhouses becomes a test tube for virus disease investigation.

Control of plant virus disease is a distant goal, apparently. No way is known to "vaccinate" a field of commercial plants. Resistant strains of plants are hard to come by, while the insects that often spread the virus diseases are hard to control.

Farmers in Florida have suffered large losses in seed production of certain legume plants because of a virus spread by tiny aphid insects.

Researchers at the University of Florida have found one means of control which allows cultivation of at least two crops of this legume before seeds become overly infected with the virus. They have learned that a heavy row of rye around the legume field acts as a "green fence" which slows down the invasion of virus-laden aphids into the legume crop. By planting such strips around the field, farmers have almost doubled the yield of legume seeds.

Such temporary control is the first step. Now the scientists are seeking permanent control of plant viruses.

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