New Machines and Gadgets

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 1037. To receive this Gadget Bulletin without special request each week, remit $1.50 for one year's subscription.

AFRICAN VIOLET PLANTER of plastic features an automatic moisture system that takes some of the guesswork out of growing tropical violets. A permanently attached saucer shows how much water should be added. The water drains from the saucer to a block of absorbent material, then rises through an interior pot of peat moss holding the plant. An air space between the peat moss holder and the planter's outer walls forms a high humidity chamber.

Science News Letter, April 30, 1960

PAPER-PLATE HOLDER grips a paper plate securely so it is less likely to bend, tip, spill or blow away. The holder is made of wrought iron wire with brass handles. The picnic conveniences are sold in low-cost packages of four.

Science News Letter, April 30, 1960

BOTTLE BABY DOLL has her milk and drinks it too. Raise the doll's arm and she drinks her milk. Lower her arm and the milk drains back into her bottle through an ingenious tube system. The 10-inch doll is made of unbreakable plastic.

Science News Letter, April 30, 1960

FIRE-RETARDANT PERSONAL FILE, shown in the photograph, features an insulated aluminum liner to protect valuable papers. The metal exterior of the low cost box has a gray hammertone finish. The file takes standard manila folders.

Science News Letter, April 30, 1960

DIGITAL COMPUTER KIT, for high school students, contains patterned cardboard and instructions for making a simplified computer. In building the computer, using 36 straight pins, a student learns how the electronic "brains" used by engineers and scientists operate.

Science News Letter, April 30, 1960

CREDIT CARD ORGANIZER has transparent pockets that hold a dozen or more credit cards, and an individual pocket for a dining club's credit book. Available in two sizes, the pocket-secretary also has a note pad and compartment for bills.

Science News Letter, April 30, 1960

HUMAN SKULL, a low-priced educational aid, is an anatomically accurate, life-size model made of bone-color plastic. Removal of the cap of the skull permits study of its interior, and a spring-action lower jaw simulates lifelike movement. A model of the brain fits into the cranial cavity.

Science News Letter, April 30, 1960

TRASH AND BAG HOLDER replaces the ordinary indoor trash basket with a frame for a large grocery bag. Trash can be placed in the bag, and trash and bag thrown out together. The sides of the holder have racks for storing various-sized grocery bags. The holder is made of aluminized wire with rubber tipped legs to protect the floor.

Science News Letter, April 30, 1960

Nature Ramblings

By HORACE LOFTIN

APRIL SHOWERS will surely bring May flowers to the face of the land, as plants bursting with new growth in the warmth and moisture of spring come into blossom. Each flower will, in turn, produce the seeds to furnish the plants of another year.

But flowering is not restricted to springtime, by any means. Some hardy species peeped through the ice in late winter, coming into blossom and then disappearing for the balance of the year. A whole host of other plants such as the composites (daisies, chrysanthemums and the like) usually wait for summer or even autumn for their peak of flowering.

A great number of plants will never come into flower at all! These are the algae, fungi, mosses, ferns, conifers and others whose life cycle does not include the reproductive structures we call the flower.

Spring Without Blossoms

The conifers, such as pine and cedar, also produce flowers. This comes as a surprise to many people, and they would have difficulty saying when they might have seen a pine in bloom. The true flower is characterized by a fleshy ovary within which the fragile seeds develop. Pines and their kin, on the other hand, bear their seed relatively naked on the inner surface of a cone petal. There is no ovary to surround and protect it.

In all the plant kingdom, from one-celled algae to the great Sequoia, only two major groups possess seeds. These are the plants that produce true flowers (angiosperms), and those whose seeds are "naked," (gymnosperms). The gymnosperms include the conifers and several lesser known types such as the sago "palm" and the gingko (maidenhair tree). The angiosperms include the vast majority of plants familiar to us, ranging from lawn grass to orchids and petunias to oaks.

In terms of evolution, the gymnosperms are older than the true flowering plants. Plants more primitive than the conifers and their relatives all require water in some form in which the motile sperm must swim to reach and fertilize the egg. The gymnosperms, though, developed pollen, a means by which the sperm could be transported to the egg by air currents. This freed these plants from dependence on water for reproduction. The rise of flowering plants occurred later—in a sense awaiting the development of insects on which they largely depend for pollination. The flowering plants now make up most vegetation.

Science News Letter, April 30, 1960