

New Machines and Gadgets

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⚙️ **RAIN CHECKS** serve as invitations for folks who say they can not get over for golf on Tuesday but "can I have a rain check." The rain checks come in a thin check book. Stubs remind the user of appointments he has made.

• Science News Letter, 78:224 October 1, 1960

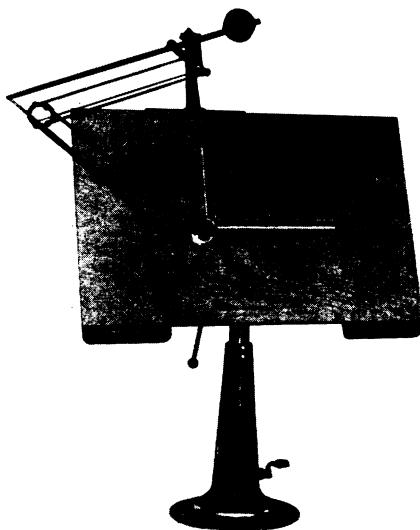
⚙️ **HOME PILOT STUDY**, a series of four long-playing record albums, teaches flying fundamentals. They are designed for persons who want pre-flight background before taking flying lessons or for students who want to supplement their regular instruction.

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⚙️ **AUTOMATIC BIRD SCARER**, a small portable device made in the Netherlands, uses acetylene gas fed into a combustion chamber behind a horn-shaped barrel. The flowing gas drives a piston that cocks a firing mechanism and thus creates small, but loud and regular explosions.

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⚙️ **HYDRAULIC DRAFTING TABLE**, shown in the photograph, rises and turns like a barber's chair. Thus the table may be adjusted to changing angles or, if classified material is being worked on, may be



quickly turned away from a visitor's gaze. Unused boards can be turned aside to provide more work space in crowded offices.

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⚙️ **DOG SLED**, for children and the family dog, seats two children with a third standing as driver. Made of Maine ash,

the sled is 53 inches long, has a filled pad of cloth backed plastic. It can be used either with the dog pulling it or as a snow sled.

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⚙️ **EASTERN LEGEND GAME** is adapted from an ancient legend of Mandalay. The legend says that wise men sit, eternally transferring a tower of ivory disks from one ruby needle to two others. The object of this small, plastic version: rebuild the tower of disks without ever placing a larger disk on a smaller one.

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⚙️ **LEATHER CLEANER**, a specially treated tissue, removes spots and thus cuts down on leather cleaning bills. Each tissue comes in a small foil package and may be used several times.

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⚙️ **BUMBLE BEE PULL TOY** features an angry toy bee that buzzes as it flies about a shatter-proof transparent dome. On the base of the toy, there is a funny face with great eyes that anxiously follow the bee's movements. Designed for pre-schoolers, the plastic toy is pulled by its 28-inch nobby string.

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Nature Ramblings



➤ BEFORE EUROPEANS came to this New World with their axes and plows, most of the eastern United States was a vast forest of hardwood trees. These great virgin stands of timber represented the so-called "climax" growth for this region of the world. Farther north and along the mountainous backbone of the East were forests of conifers; these were "climax" forests for the cold country. Even farther north, beyond the timber line, matted shrubs and grasses formed the tundra climax.

When the pioneers went westward, they found the great grasslands, the climax of the midland of the nation; and in the Southwest they discovered the arid cactus and sagebrush climax of the desert. In the far west were replicas of vegetation types they had met elsewhere, the types varying with the temperatures and aridity of the hills and valleys.

Climax vegetations are the plants which come to dominate a region when it is left to nature. The type of climax depends on the soils and climate of a region, especially the amount of moisture and temperature. For example, the moisture of the eastern states along with the generally warm

Patterns in the Green World



climate leads to the hardwood forest climax.

Moist but cold weather in the north and in the mountains, results in an evergreen conifer climax. Proceeding westward across the nation, the climate becomes increasingly dry, so that the hardwoods give way to grasslands and these in turn to deserts.

Each region on the face of the earth has a climax vegetation typical of its soils and climate. But the term "climax" implies what happens when nature is left alone. Man's axes destroyed the great virgin stands of the East and his plows the grasslands of the Midwest. Even large stretches of

desert vegetation have been altered by cattle grazing, farming and the introduction of new plants.

But nature is patient; and every time a change is made in the land, a slow but steady succession of new plants tends to restore the old balance. If man were to be eliminated from the earth, it would only be a matter of time before each region had its appropriate climax vegetation restored. This "plant succession," leading from an unnatural or non-typical vegetation toward the climax type, usually follows a regular pattern.

Anyone can figure out the probable recent history of a piece of land if he knows something of plant succession. For example, when a cultivated field is abandoned in the southern states, typically it is filled with annual plants the following year. After about two years, perennial plants come in, and these persist until young pines, sumacs, persimmons and the like take over. Soon the pines dominate. After several years, hardwoods begin to grow in the shadow of the big pines, and the pines then give way to a complete hardwood forest—the climax forest.

—HORACE LOFTIN

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