

# • New Machines and Gadgets •

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**SUN DIAL** for the garden made of anodized aluminum is reportedly more accurate than an electric clock. Based on a new patent, the dial is preset at the factory for the latitude and longitude at which it will be used. A simple adjustment changes the sun dial to daylight time and back to standard time.

Science News Letter, August 29, 1959

**GOLF TEE MARKERS** made of butyrate plastic come with six-inch metal spikes that hold them firmly in place and leave tees unmarred. About four by five inches in size, the markers are weather resistant and will withstand rough handling and accidental blows. They come in red, white, blue or yellow.

Science News Letter, August 29, 1959

**CHEMICAL SLIDE RULE** shows relevant information about the elements including the electron structure, boiling points, terrestrial abundance, and ionization potential. By adjusting the plastic slide rule, the different groups of elements are shown. It is designed for chemists and for the classroom.

Science News Letter, August 29, 1959

**DOOR MAT** made of polyethylene weighs less than a pound and can be quickly cleaned by a hose or under a sink faucet.



The diamond design of the mat, shown in the photograph, allows ventilation for quick drying and permits mud, snow and dirt to be shaken off readily.

Science News Letter, August 29, 1959

**RADIATION DETECTOR**, smaller than a cigarette package, is self-contained and emits a loud "whine" when the radiation level becomes hazardous. The signal in-

creases in intensity as radiation increases. The low-cost, transistorized detector is designed for civil defense and peacetime application in the atomic energy field.

Science News Letter, August 29, 1959

**ALL PURPOSE SCALE** for home, office or shop use weighs from zero to 25 pounds by two-ounce graduations. The scale has a baked-on ivory enamel finish and red trim. Precision made mechanism is guaranteed for one year against mechanical failure.

Science News Letter, August 29, 1959

**ALUMINUM PAINT** for roofs and sidings is said to cool building interiors up to 15 degrees in summer and to retain heat in the winter. The paint can be applied on asphalt shingles, asbestos-cement shingles, composition roofing, slate, corrugated metal and tar paper. It comes in a variety of pastel shades.

Science News Letter, August 29, 1959

**ANIMAL RESUSCITATOR** designed for pets has a cone-shaped butyrate plastic face-mask. The transparent mask permits the operator to observe the pet during treatment. Oxygen flows from a cylinder into a bag and then, without assistance, into the animal's nose and lungs. Positive pressure resuscitation can also be applied.

Science News Letter, August 29, 1959



## Nature Ramblings



By HORACE LOFTIN

THE OCEAN has been called the mother of life, for undoubtedly it was in the sea of thousands of millions of years ago that the first living thing appeared.

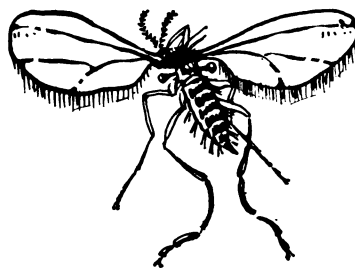
From a primeval protoplasmic beginning, a multitude of new kinds of living things evolved as the millions of years ticked off, filling all the livable areas of the earth's oceans, rivers and lakes.

From this watery beginning, plants and animals early in their history began to creep upward into the intertidal region, then the beach or river's edge, then to dry land itself, so that over the eons life became equally at home on the soil as in the water.

The last of the elements to be conquered by living things was the air. It is only lately (geologically speaking) that animals have taken wing. Insects probably were the first winged creatures. No other animals without backbones are known to fly.

The first backboneed animals appeared

Up in the Air



much later on the scene than the insects and it was many millions of years more before they took to the air. Early examples can be seen in such forms as the flying fishes, which glide through the air for short distances. Some of the lizards also have developed membranes with which they may glide from tree to tree, but this of course is not true flight.

Fossil evidence, however, tells us of ancient winged reptiles, the pteryodactyls, which were capable of sustained flight.

These all perished along with the dinosaurs.

But another reptilian line gave rise to creatures which ultimately evolved into the birds. Remains have been found of creatures which seem as much reptile as bird, but which had feathers and could fly. From such "feathered reptiles," our modern birds have emerged to dominate the air with the ease that a fish dominates the water.

Another offshoot of the reptiles led to the mammals. Alone of this group the bats have developed true flight. There are a few mammals like the "flying" squirrels which manage to sail through the air for short distances, but this falls far short of the goal of flight.

Thus, of all living creatures, only the insects, birds and bats have conquered the third element, the air, in the course of evolution. However, if man's domination of his environment through technology can be considered a new form of evolution, perhaps man deserves the title of conqueror of the air among the animals.

Science News Letter, August 29, 1959