

New Machines and Gadgets

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⚙️ **PORTABLE SUN LAMPS** with fused quartz ultraviolet tubes are contained in compact purse-size units. They are designed for use in offices and hotel rooms as well as in the home. The tubes are said to produce all the beneficial rays of the ultraviolet spectrum.

Science News Letter, January 31, 1959

⚙️ **LAMP SHADE COVER** of transparent plastic has built-in elastic bands at top and bottom edges and comes in form-fitting sizes to fit any shade shape. Quickly and easily slipped on, it protects against dust, grease, cooking gases and everyday wear. The cover is waterproof and readily cleaned with a damp cloth.

Science News Letter, January 31, 1959

⚙️ **ANIMAL CAGES** are made of heavy gauge stainless steel with vermin-proof seams and rounded inside corners for easy cleaning. Reinforced frames with pre-drilled holes permit easy tiering and assembly into multi-cage units. Gates are hinged to hang straight, swing easily, and be removed without the use of tools.

Science News Letter, January 31, 1959

⚙️ **PAINT CAN RIM**, shown in the photograph, fits snugly into groove on top of opened can and is made of unbreakable high density polyethylene. It has a beveled pouring spout and a ridge to guide



excess paint back into the can. A built-in ceramic magnet holds the brush firmly with the bristles pointed down into the paint supply so that the brush handle will not become full of paint.

Science News Letter, January 31, 1959

⚙️ **STEAM CLEANER**, electrically powered and heated, is for use where fumes, flame, or excess water would be objectionable. It is ready to clean 90 seconds after pressing the motor switch, and is protected against damage or improper operation by

automatic shut-off of heaters in case of water failure.

Science News Letter, January 31, 1959

⚙️ **DISPOSABLE SYRINGES** made of plastic are available with or without needles. Individually sterilized, packaged, and ready for immediate use, the syringes eliminate the danger of cross-infection through re-use. Contoured plunger heads and grips and longer barrels make for quick, sure handling.

Science News Letter, January 31, 1959

⚙️ **FIRE EXTINGUISHER** has container of squeezable flexible plastic. Extinguishing powder can be sprayed to smother different types of fires, including oil, grease and electrical, rapidly and safely. Sized for household use and vehicular glove compartments, the product is non-poisonous and non-corrosive.

Science News Letter, January 31, 1959

⚙️ **ALPHA-BETA-GAMMA METER** is transistorized, portable, light weight and operates on standard flashlight batteries. It is easy to read, and has three sensitivity ranges and a high impedance headphone. The survey meter is used in hospitals, reactor installations, research plants for personnel protection and monitoring radio-activity.

Science News Letter, January 31, 1959



Nature Ramblings



By HORACE LOFTIN

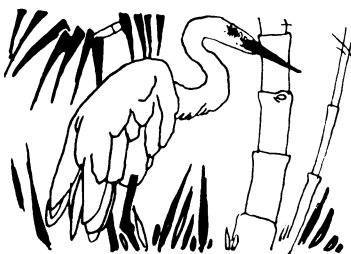
Feathered Serpent

➤ THROUGH THE LENSES of the seven-power field glasses, you see the cold glint in the eye of the big, sleek bird as it stalks its victim. It is in the shadows, and the brightness of its plumage is dimmed. Only the beady eyes, the neck, sleek body and a sinuous grace of movement stand out now.

This sight makes you vaguely uneasy. What does it remind you of, you wonder. Then it comes to you: it is as if you were gazing at a feathered serpent!

And in a very real sense, it is a feathered serpent you see when you watch a bird. Except for the feathers and some other external and internal modifications, birds are structurally very similar to the great class of reptiles from which they are directly descended.

Looking back to the ancient age when the earth was dominated by a host of fantastic reptiles, there was a first hint of what was to come. Certain of these reptilian monsters



developed membranous wings with which they could soar through prehistoric space. But these Pterodactyls were in a blind alley and perished with the other ancient reptiles. It was from another reptilian stock that the first true birds were to arise.

Through the restless change of evolution, some ancient reptile group developed feathers from the typical scales of its kind, and "soon" there were beasts half reptile-half

bird in the air. The oldest bird-like fossil known was the size of a pigeon. It had long feathers and was apparently capable of flight. Reptile-like, its bill was armed with teeth and the tail was long and bony. But from such a beginning, the air became populated with true birds.

What is a true bird? Immediately setting off birds from all other living creatures is the presence of feathers. Then the forelimbs are always modified as wings. There are never more than four toes. The mouth is extended in a beak and there are no teeth in living birds. The heart is four-chambered and, perhaps the greatest advance over reptiles, the birds can maintain their body temperature independently of the environment.

From their status as a "poor relation" of the reptiles, the birds have become one of the most successful types of living beings, with some 8,600 living species known to science.

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