

New Machines and Gadgets

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EASY CLAM OPENER holds a clam steady in a maple base while an attached knife cuts between the shell halves and a wedge spreads the shells open. The knife is attached to the base in an arrangement like a paper cutter. The base has a scooped out hollow to hold clam juice.

Science News Letter, June 18, 1960

CONVERTIBLE HAT can do duty as a street hat, bowler or casual. The man wearing it simply shapes it as he likes and snaps on one of the hat's interchangeable bands. The manufacturer claims the hat can be folded, pocketed or even sat on without damage.

Science News Letter, June 18, 1960

BIRD MODEL KIT provides model parts, brush and paints for assembling and painting a game bird. Painting is "by the numbers." Kits are available for the bald eagle, mallard duck and ring-necked pheasant.

Science News Letter, June 18, 1960

THUMB-CONTROLLED HOSE NOZZLE, shown in the photograph, provides easy, one-hand control in watering lawns and gardens. User can flip the



nozzle's control with his thumb to adjust for any spray, from mist to stream. The nozzle is made of chrome-plated metal.

Science News Letter, June 18, 1960

ROBERTS RULES CARD, pocket-sized, is handy for quick reference. About 350

points of order, legislative rules and major motions are condensed on the plastic card with sliding insert. The legislative device operates like a slide rule.

Science News Letter, June 18, 1960

TOY SAFE VAULT features a burglar alarm and the trademark of a major manufacturer of real bank safes. The safe has a slide out coin drawer, drawstring money bags and a combination lock.

Science News Letter, June 18, 1960

DISPOSER ADAPTER KIT converts a garbage disposer into a compact floor unit to eliminate the problems of sink installation. The kit includes a three-legged stand, an 18-inch bowl sink and a manual starter switch.

Science News Letter, June 18, 1960

ONE-LEVER OUTBOARD CONTROL permits the operator to go forward or reverse and accelerate or decelerate by movement of one lever. The usual outboard motor remote control has a lever for throttle and a second for gearshift. The new device is made of metal and nylon. Existing cable controls may be used when the device is installed.

Science News Letter, June 18, 1960



Nature Ramblings



By HORACE LOFTIN

THERE IS NO MORE apt description of a man without teeth than "toothless as a bird.

Of all the vertebrate animals, from fish to man, the birds are the only major group characterized by absence of teeth. There are creatures here and there without these useful tools, such as the turtles, but these are the exceptions to the rule.

Even the lowest forms of fishes, the lampreys which completely lack jaws, have tooth-like structures with which they rasp away the flesh of their prey.

Sharks and bony fishes in general have a mouthful of teeth, variously shaped for biting, crushing and holding.

As a group the amphibians are fairly well toothed, including some teeth on the roof of the mouth in many forms. These amphibian teeth are generally small, pointed, and serve mainly in holding and forcing food into the throat.

Reptilian teeth are typically pointed for holding; of prey, and they lack roots. Snake

A Tooth for Every Job



teeth are generally curved backward and may occur in several rows on the jaws as well as on the roof of the mouth.

The snake's lower jaw can be unhinged in the middle. It feeds by alternately moving one half of the jaw, then the other, dragging the prey down into its throat by the recurved teeth.

We have already noted that birds are all lacking in teeth. Yet it was not always so! Remains of the oldest fossil bird known have jaws well equipped with reptile-like teeth.

Bird teeth have been lost in evolution, perhaps in part as a means of reducing the weight of the head region as an aid to flight.

Mammals represent the last word in variety and structure in dentition. Each kind of mammal has evolved its own particular array of teeth to conform with its needs.

This is so true that the identity of a mammal can often be determined on the basis of one or a few teeth.

The "primitive" number of teeth in the mammals is 44. Opossums have 50, but most show a reduction from the basic pattern.

Man, for example, has 32 teeth, while the rodents may boast of only 16— though they can do a lot of gnawing with those few.

Mammalian teeth are generally specialized into four kinds: incisors in front for cutting, canines for stabbing, premolars and molars for grinding and shearing.

Science News Letter, June 18, 1960