

• New Machines and Gadgets •

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE SERVICE, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 918. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **DISPOSABLE BARBECUE** for indoor or outdoor use is a completely self-contained unit. It consists of an aluminum container filled with hardwood charcoal, igniter and grill. The grill is big enough to handle two large steaks or six hamburgers and is mounted on a folding wire stand.

Science News Letter, January 18, 1958

⚙️ **TEACHING MICROSCOPE** designed for school use is built on a full-sized laboratory-type stand. Fine focus is made with a slow tube travel of 0.25 millimeters per revolution of the focusing knob. The microscope has a 10X eyepiece that is locked in to prevent loss or damage, but can be removed when desired.

Science News Letter, January 18, 1958

⚙️ **STEREOPHONIC SOUND KIT** adapts tape recorders for stereophonic playback. The kit consists of an in-line stereophonic magnetic tape head for replacing the standard monaural head. One set of leads from the head goes into the recorder's amplifier and speaker; the other to a Hi-Fi amplifier and speaker.

Science News Letter, January 18, 1958

⚙️ **SNAP-ON INSULATION** for industrial pipe is made of resilient urethane foam. It



has a service range of from minus 200 to 250 degrees Fahrenheit. The snap-on material, shown in the photograph, available in almost any size, shape and thickness, can be stretched to nearly twice its original size, and will not support combustion.

Science News Letter, January 18, 1958

⚙️ **RELIEF GLOBE** made of a pale blue plastic is ready for filling in with paint or pencil. The homemade plottings and color-

ings of the world can be washed off and replaced by new information. Mounted on a metal base, the plot-it-yourself world measures 12 inches in diameter.

Science News Letter, January 18, 1958

⚙️ **PORTABLE ALUMINUM SHELTERS** can be easily dis-assembled, moved and re-assembled. The shelter parts are available in varying widths and heights and come completely fabricated with bolts and screws. A 10-foot by 20-foot carport, for example, weighs approximately 100 pounds.

Science News Letter, January 18, 1958

⚙️ **TRANSISTORIZED ALARM** is tripped by the approach of a man. Operating on ordinary current, the burglar alarm has batteries that take over in an emergency. The alarm is designed for three-fold use: sounding off in its immediate area, flashing a silent alarm at a police station, and signaling a guard station.

Science News Letter, January 18, 1958

⚙️ **ELECTRONIC CONVERTER** is designed to turn any radio into a clock radio. The device has four control knobs that permit pre-settings for turning various appliances on or off. Two outlet sockets make it possible to control two appliances at once.

Science News Letter, January 18, 1958



Nature Ramblings



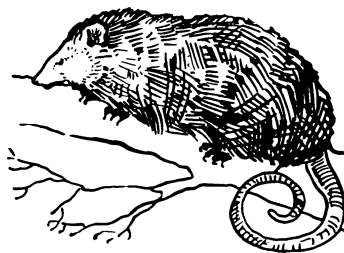
By HORACE LOFTIN

*Ol' Possum is a cunnin' thing,
He ramble in the dark,
Nothin' will disturb his min'
But to hear my houn' dog bark!*

► IF THERE is any fact to this old folk poem, Br'er Possum's peace of mind might be due to the fact that, structurally, he does not have much mind to disturb! In common with his fellow Marsupalia or "pouched animals," the opossum possesses a relatively small and primitive brain.

The characteristic pouch (and its use) also mark the marsupials as primitive. There is no placenta formed between the mother and embryo; the young are born in a very immature state. The gestation period of the opossum is only about 12 days and a litter will fit with ample space into a teaspoon. When born, these young crawl up the mother's abdomen and into the pouch, fasten on the first available milk supply and stay there until they reach a

Pouched Mammals



stage comparable to the newborn young of other mammals.

Only one other order of mammals, the egg-laying monotremes (platypus or duck-bill), exhibits a more primitive means of reproduction.

Excepting the opossums, which are found in North and South America, all living marsupials are wholly confined to Australia. Typical Australian marsupials are the kangaroos, wallabies, koalas and bandicoots.

Tropical North and South America boasts an abundance of opossum species. Only the Virginia opossum, *Didelphis virginiana*, however, is found within the limits of the United States.

All North American marsupials, and this means opossums, can be identified as such by the following characteristics: the female is provided with a pouch in which the young are carried; the tail is prehensile; the animal has 50 teeth; and the hind foot has five toes, including an opposable "thumb."

The Virginia opossum is about the size of a house cat. The famous "possum grin" is due to the handsome array of long, sharp teeth it shows when cornered. Another famous opossum trick is that of "playing possum," or feigning death at the approach of danger. This may be giving him more credit than he is due, however, since the simulated death is not an "act" but apparently something like a true faint or cataleptic state.

Science News Letter, January 18, 1958