## · 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 911. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

SMALL MICROSCOPE is described as useful for TV testing and/or microbe hunting. Originally designed for calibrating the color television tube, the five and one-half ounce instrument has an extensible foot that equalizes tube curvature and permits focusing to a depth of 70-mm. It is a 25-power microscope.

Science News Letter, November 30, 1957

SNOW MOWER, made of heavy steel and mounted on wheels, looks and acts like a lawn mowing machine. The 30-inch blade can be re-positioned by turning the wing-like handle. The rolling snow shoveler is said to require no adjustments and can be operated by a man, woman, boy or girl.

Science News Letter, November 30, 1957

EARTH-SKY GLOBE consists of two transparent acrylic plastic globes, one within the other on the polar axis. A map of the earth is printed on the inner globe and a detailed star map is printed on the inside surface of the outer globe. A sun pointer is provided between the two globes.

Science News Letter, November 30, 1957

STORAGE ON WHEELS is said to increase capacity of store rooms and filing areas up to 50%. Filing cabinets, storage shelves and tool cabinets are mounted on ball-bearing wheels that roll on steel tracks.



The wheeled base units, shown in the photograph, are adjustable in all directions to fit units ranging from 24 to 48 inches in width and 9 to 42 inches in depth. The load capacity of each unit is one and one-half tons.

Science News Letter, November 30, 1957

BABY GRAND PIANO for youngsters has a one-octave keyboard molded of a styrene plastic. About eight inches square and four inches high, the top, face and legs are in metallized gold finish and the sound

box is colored to resemble polished wood.

A song book is included with the toy piano.

Science News Letter, November 30, 1957

STRATEGIC GAME, played the world over, is now available to Americans. Said to be as simple as tic-tac-toe or as profound as chess, the game includes a playing board and either 170 or 370 checker-shaped pieces, depending on the size of the set. The game, played by two or four, is described as simple enough for a 10-year-old to learn in one session.

Science News Letter, November 30, 1957

to LAUNDRY MARKER has a spillproof bottle to prevent loose ink from messing up clothes. It consists of a pen with an arrow-point felt nib and a half-ounce bottle of black ink. The indelible, instant-dry ink can be used to personalize, mark and code clothes and linens.

Science News Letter, November 30, 1957

DEFINITION IN THE SEAT TO take the bounce and jar out of riding is of deck-chair type construction and weighs approximately 18 pounds. Tubular aluminum is used for the frame with a canvas hammock for the seat and back. The jeep driver can adjust the seat to his weight. The seat rests on a rubber torsion spring suspension system.

Science News Letter, November 30, 1957



## Nature Ramblings



## By HORACE LOFTIN

THE NATION consumes each year more than a billion broiler-sized chickens raised commercially. not counting the numberless chickens of all ages, sizes and degrees of toughness raised on a non-commercial scale.

This adds up to a lot of chicken. The average broiler weighs 1.9 pounds, or 30.4 ounces. Multiply this by the number of chickens and you come out with roughly 1.9 billion pounds of broilers raised annually in the U.S.

But not all this is meat for the table. If the average broiler weighs 30.4 ounces, of this amount 3.1 ounces are feathers and 9.0 ounces are offal. Quick calculations will show that some 200,000,000 pounds of feathers and 600,000,000 pounds of offal remain as by-products or waste from the yearly broiler business!

## All But the Cackle



The creation of such large amounts of waste in the course of making useful producs acts as a challenge to any industry. Livestock processors long ago found ways to use almost every "waste" part of animals. It is said that pork processors use all of the pig except the squeal. This is now the approach of chicken processors.

One of the most surprising uses made of chicken feathers is as a supplementary feed for poultry.

It has been found in the laboratory that chicken feathers contain appreciable amounts of six important amino acids. Upon heat and pressure treatment, 75% of these substances are left in easily digestible form, ready for use as a feed supplement. Treated feathers are also used in fertilizers, which is also the major use made of the offal.

By a mechanical process of crushing, chicken feathers have been made into soft, pliant stuffing for quilts, mattresses and sleeping bags, rivaling the goosefeathers used in Grandmother's feather bed.

The end is not in sight, either. Some of the things now under investigation for chicken feathers include the possibility of producing synthetic fibers, hormones, plastic extenders and bristles from them.

You might say now that the poultry processors use everything about the broiler except its cackle!

Science News Letter, November 30, 1957