New Machines and Gadgets

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 950. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

5 FOLDING BOAT LADDER is made of aluminum. The boarding ladder has nonskid steps and square hooks to fit gunnels up to nine inches in width. Support braces are adjustable to three positions and fold flat when not in use. Two-, three-, and four-step models are available.

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SURFACE SANDER has a soft sponge pad on which the abrasive is mounted to provide powder puff-like action. The sander, which can be used with any onequarter inch electric drill, also has a rubber universal joint for using the drill at almost any angle. A tacky disc surface permits changing the abrasives.

Science News Letter, August 30, 1958

to FOAM-BACKED PLACE MATS are described as providing quieter dining. The mats are seamed to fold flat to one-third of their 12-by-17-inch size for storage. Available in a wide variety of colors and designs, the mats are backed with a sound-deadening urethane foam.

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the LITTER CARRIER rolls along the ground on low-pressure pneumatic rollers.



It can be pulled by one man over most any terrain for rescue work. The litter, shown in the photograph, can be knocked-down for storage.

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SUN TAN TREE is nine feet tall and has nine interchangeable metal leaves that can be turned to reflect the rays of the sun. The leaves, which measure two and one-half feet long and 22 inches wide, are silver on one side and red, green, blue, pink, turquoise or gold on the other.

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PROTECTED FLASHLIGHT has plastic fittings and an oversized head. The head and bottom fittings are molded of a high-density polyethylene plastic. The big globe-shaped head protects both the lens and the bulb.

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DEBRIS PICK-UP TOOL will collect litter from grass, gravel, weeds and hard surfaces, as well as clean up after the dog. With scissor-like action, two steel scoops can be brought together. The tool is 33 inches long.

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CAMP AND PICNIC SETS are designed to accommodate from one to six persons. The individual camp kit, for example, includes a pail with cover, fry pan, dish, all made of aluminum, and a heatresistant plastic cup. All pieces nest together.

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Nature Ramblings



By BENITA TALL

> YOU MAY NOT be able to distinguish a Scotty from Sealyham, but the chances are good that you can tell the difference between a dachshund, the "hot-dog" dog, and a collie.

Actually the difference between the shortlegged, long-bodied dachshund and collie is so extreme that it seems stretching the meaning of the word "dog" to call them both dogs. The shape of head, body, coat coloring, hair, tail, even the way each dog walks is different from the other breed.

Considering the immense variety in the world of dogs, you might think that the dog show judge or dog breeder would have an impossible job.

Within a breed, the dogs look much alike; some individuals will have a prettier or shinier coat or appear more alert, perhaps, but to the untrained eye the dogs are identical. When the judge seeks to choose the best dog from two different breeds, it seems he is faced with insurmountable difficulties. How does he make his choice?

He studies the dog beneath the skin. Of course, the dog's coat and general looks count in the final determination, but



Dog Beneath the Skin

it is his conformation that determines if he is a prize-winner among dogs.

There is a very close relationship between dog's physical structure, his stamina and capacity for carrying out the work assigned to the breed. Agreement with the standards set for the different kinds of dog is a yardstick for measuring the "sound animal."

Some of the most important elements of a dog's conformation are his head, spine, gait or kind of movement, and his scenting ability, sight and hearing senses. These are what the judge and dog breeder are most concerned with.

A ring of bone, the zygomatic arch, that

encloses the cavity in which the eyeball is fitted, is what determines the width of the head no matter what the breed is. The Pekinese or pug, with their short faces, have relatively wide arches with wide-set eyes. It is thus easier for a pug to look at an object in front of it with both eyes at one time than it is for a long-faced terrier.

The relation between the various portions of the dog's spinal column influences everything from the way his tail is carried dipped as in the collie or up as with a terrier -to the way he moves and breathes. The long-backed dogs such as the dachshund must also have a long chest.

The judge is continually looking for the right qualities in a dog, one that moves well, is sound from front to back and has stamina.

Breeds vary extremely in their scenting ability, their vision and hearing. Deafness is associated with some white breeds; flatnosed breeds have poorly developed scenting ability, and most dogs see double.

For each breed the judge must consider the work the dog was bred for and how well his senses and responses equip him for carrying out that work.

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