

• New Machines and Gadgets •

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TRANSPARENT-TAPE DISPENSER, designed especially for home use, is made of sculpture-styled plastic. It is weighted so that it will not tilt or slide when tape is dispensed from it. The dispensers accommodate two tape widths and come in green, pink, yellow or coral.

Science News Letter, May 23, 1959

STEERING WHEELS for pleasure boats are made of gold- and silver-flecked plastic made in a variety of colors. Molded hand grips and spokes are in white plastic. The wheels come alone or with chrome-finished universal mounting brackets, permitting installation at different angles.

Science News Letter, May 23, 1959

SPACE TRAVELER TABLE GAME for four players consists of a playing board with planetary orbits, a deck of 45 space traveler tickets, 9 space ships, 3 planets, 4 "station stop" schedules and rules. The object is to be first to reach Mars. Winning is said to depend on foresight and planning as well as chance.

Science News Letter, May 23, 1959

GREAT CIRCLE MAP INDICATOR, shown in the photograph, has a rear-projected wedge of light that shows the amateur radio operator when his antenna is in the proper direction. The plastic, 16-inch-diameter indicator may be hung on the



wall or mounted directly on the control table. The light wedge, ten degrees wide at the edge of the indicator, moves on the map as the antenna rotates, and shows beam direction and width.

Science News Letter, May 23, 1959

PLASTIC FLOOR COMPOUND made with epoxy resin and hardener is said to resist abrasion, chemicals and greases that ruin conventional wood, metal or concrete

surfaces. The material may be broken up and patched to conform with redesigning plans without need of replacing entire sections.

Science News Letter, May 23, 1959

NURSING BOTTLE has a bottom valve that, it is claimed, will relieve the vacuum built up in the bottle by sucking action, thereby keeping the nipple from collapsing and interfering with milk intake. The bottle is made of plastic and will withstand sterilization temperatures.

Science News Letter, May 23, 1959

GARMENT-TYPE INFANT SEAT, small enough to put in a handbag, can be slipped onto a kitchen chair, making it serve the purpose of a high chair. It may be used to prop up babies from six weeks to six months in a crib, carriage or armchair. It also doubles as a substitute traveling bed.

Science News Letter, May 23, 1959

FOOD CUTTER of plastic has two replaceable steel blades, one straight and the other corrugated. A dial adjusts thickness of each slice. A wide variety of cuts is made possible by blade selection, dial setting and direction of slicing. The cutter can be used to shred cabbage; slice potatoes, beets and carrots; make cheese straws; cut corn from the cob, and ripple potatoes.

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Nature Ramblings



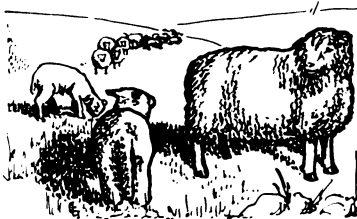
By HORACE LOFTIN

IN ALL the animal kingdom, the only creatures to possess that strange structure called "hair" are the mammals. Moreover, every kind of mammal wears a coat of hair at some stage of its life history, although you may have to look at an embryo to find it. Man has a hairy embryonic coat, as have mammals such as the whales and elephants which are practically devoid of hair in the adult stage.

Hair is derived from cells in the skin. The root is alive and capable of producing new hair cells, while the external hair is dead. Each hair shaft has three layers: a thick inner pith; a middle group of transparent cells which contain the color pigments; and an outer layer of overlapping scales. These scales may form in different patterns. Experts can often identify a mammal as to species by an examination of the hair structure alone.

The body hairs are of two general kinds,

... Have You Any Wool?



the guard hairs and the under hairs. The guard hairs are usually longer and coarser, furnishing protection. These include various kinds of spines and quills, such as the porcupine uses so well; and the coarse bristles of the usual mammalian coat. These bristles are removed in the preparation of pelts for use as fur garments.

There are three general types of under hair. Most typical is the soft, short coat of fur. Another is wool, distinguished by its length and curliness. The fine down of

fetal or very young mammals is known as "vellum."

Other specialized hairs include "cat whiskers," or vibrissae, found in many mammals. These are sensory in nature. The horns of rhinoceroses are composed of a compact mass of hair, hardened by a material called keratin.

The hair of most mammals ceases growth when it reaches a certain length, such as the body hair of humans or the fur of bears; this is called definitive hair. Some hair, however, grows continuously; this is called angora hair.

Hair is useful in a number of ways to the mammals, but most important probably is its function in heat insulation. Only the birds (with their coats of feathers) and the mammals (with their coats of hair) are able to regulate their body temperatures—an ability which has helped them maintain their places at the top of the animal kingdom.

Science News Letter, May 23, 1959