New Machines and Gadgets

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WIND METER can be held in the hand. Designed for outsdoorsmen, golfers, boat-owners and amateur weather experts, the device is read like a thermometer. Two scales are provided, one reading from zero to 10 miles per hour and the other from two to 60 mph.

Science News Letter, July 13, 1957

disassembled for storage in a sewing machine drawer or basket. The blow-type marker can be adjusted from one to 24 inches in height and comes with a supply of marking powder and a pin cushion that can be attached to the top of the marking rod.

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TOY MICROSCOPE for the do-it-yourself young scientist is made of plastic and has hand-ground lenses. Designed for a child eight years old or older, the kit contains all the necessary parts and instructions.

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this summer can also be used as a carry-all and a head rest. Made of a plastic vinyl sheeting, the table measures about 30 inches square and, when inflated, keeps food or



games nearly a foot off the ground as shown in the photograph. Deflated it can act as a bag holding up to 20 pounds. It is available in three color combinations.

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MEDICAL STETHOSCOPE is described as both amplifying sound and shutting out unwanted sounds. A British in-

vention, the "brain" of the instrument is contained in an 18-ounce box to be suspended from the neck. Two sets of ear pieces can be used and a tape recorder and/or loud speaker attached.

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By PLATE-CUP RACKS are coated with plastisols based on plastic vinyl resins. No hooks are needed with the racks. The plate rack holds 24 dishes. The cup and saucer rack holds eight of each. The racks are designed to save space and cleaning.

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HOBBY MATERIAL developed especially for model builders and craftsmen is a prepared dry mixture of pulverized wood to be mixed with water. When mixed, it resembles clay and can be modeled or molded. By air, sun or oven, it dries into real wood.

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TARPAULIN FASTENER for polyethylene film covers looks like a shower curtain ring and is described as working like a garter. The ball and clamp can be used to secure film covers over machinery, roadbeds and haystacks.

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Nature Ramblings



By HORACE LOFTIN

➤ IN EVERY FLOCK of chickens, there is one bird who can peck every other chicken in the flock and never be pecked back. This bird is the very cream of chicken society. Just below him is another bird who can peck every other bird of the flock except the first one.

Chicks as early as nine weeks of age learn their peck order. This peck order goes down through the entire flock until finally there remains just one bird which every other chicken can peck with impunity. This poor fellow has absolutely nobody left to peck at. He is the lowest of the low in avian society.

Many kinds of birds that live in flocks show some kind of peck order in their social organization. Commonly the males are dominant over the females. Experiments show, however, that this male superiority may only be feather deep.

The chaffinches, for example, have a typical peck order, including male dominance.

An inquisitive British scientist dyed the breasts of several female chaffinches in the

Fine Feathers



typical male color pattern, then released them in a flock of normal females to see what would happen. From the very first, the pseudo-males showed a decided advantage over the females. They won 84% of all pecking encounters with the females.

Then the scientist took the two lowest birds, females, in the chaffinch totem pole, dyed their feathers in the male fashion and placed them back in the flock of females.

These birds had won only an average of 15% of all their fights before. They quickly

came to win 50% of all encounters when in male colors.

Obviously, normal female chaffinches have a healthy respect for chaffinches with the reddish breast of the male. Do they learn this respect from being pecked around by true males? Or do they react instinctively to the male coloration? To test this, some pseudo-males were placed with a group of hand-reared females who had never seen adult male chaffinches.

What happened? The females "fled precipitately" when they met with the pseudomales, indicating instinctive deference to the fine feathers of the male.

In many groups of animals there is an actual caste system. Sometimes the basis for one animal's superior status is its sex, or it may be "skin deep"—a question of feather color—or, in other groups, it may be just a matter of which animal has been there longest.

Seniority rules the dairy herd. Even when an older, stronger cow joins the herd, she has to take a place at the bottom of the group.

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