

• New Ideas 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 1151. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **AUTOMATIC PLAYER PIANO** is an electrically operated plastic replica of a standard model. Easy to play, it has an automatic rewind and on-off switch. The 30 keys of the authentic toy cover 2½ octaves, including sharps and flats. It can be played with or without the roll. Six long playing rolls of complete songs are included.

• Science News Letter, 82:16 July 7, 1962

⚙️ **MOISTURE ABSORBING PELLETS** keep cookies and crackers crisp and dry and salt free flowing during humid weather. The pellets are said to impart no odor and to be harmless. Saturated pellets can be dried in the oven for use over and over again.

• Science News Letter, 82:16 July 7, 1962

⚙️ **THERMOELECTRIC PRINCIPLE DEMONSTRATOR** produces usable electricity directly from a candle or gas flame, and even from a stream of hot air. Useful for classroom demonstrations to show applications of thermoelectricity, the device has no moving parts to wear out or replace. It is completely noiseless and unaffected by humidity.

• Science News Letter, 82:16 July 7, 1962

⚙️ **ELECTRIC DOG CLIPPER** designed especially for home use is compact and lightweight. Operating on 115 volt current, the clipper, shown in the photograph, is housed in shock resistant plastic and has remov-



able steel blade. An instruction booklet covers most common styles of clipping for poodles and special clips for hunting and working dogs.

• Science News Letter, 82:16 July 7, 1962

⚙️ **CAR IDENTIFIER** made of colored anodized aluminum enables a person to find

his car quickly in a crowded parking lot. The triangular pennant showing an initial on each side is attached to the aerial post of the car. It does not affect radio reception. The weatherproof flag is available in six different colors.

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⚙️ **SUPER-SOFT URETHANE FOAM** has the softness of down. Washable, it is resistant to water, rot, chemical solvents and rodents. Potential uses for this foam include bed pillows, chair arms and backs, throw cushions, backs for automotive seats and packaging for fragile products.

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⚙️ **NEW SERVICE MANIFOLD** eliminates exposed piping on work tables in laboratories. Made of hollow-cored solid aluminum, the units nest neatly into a complete service fixture panel with an acid-resistant reagent shelf. The fixture is easily installed by drilling and tapping at desired locations.

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⚙️ **AUDIO-VISUAL ALBUMS** tell the story of national parks and major tourist attractions such as the Grand Canyon and Yosemite National Park in color and sound. Each album consists of 16 color slides and a 12 x 12 inch 33 1/3 RPM record, giving a complete story of one attraction. The narration is synchronized with background music.

• Science News Letter, 82:16 July 7, 1962



Nature Ramblings



Garden Spider

Photograph by FREMONT DAVIS • Text by WILLIAM E. SMALL

► THE BEAUTIFUL orange and black garden spider will soon be reaching maturity, becoming an adult when the plants in the garden are large enough to support its intricate and ornate orb web. One of our largest and showiest spiders, *Miranda aurantia*, must work very hard for a living.

Spiders, as a group, are perhaps the most misunderstood and mistreated creatures on earth. The frequent "Ugh!" of revulsion and the tendency to call them insects go hand in hand. But they are not insects. Spiders are arachnids, creatures with eight jointed legs. And they aid man in his battle against insects.

Miranda, for example, is a harmless, lovely spider, with a large body gaily marked with bright orange dashes and spots. She spins her large, strong web, sometimes three feet in diameter, across our garden paths, in the meadow or along the roadside.

The web is spun from the small spinnerettes, finger-like organs in the abdomen, being first a liquid and becoming a thread when it leaves the body. Miranda spins a nearly circular web with a zigzag band of white silk up and down across the middle and a round thick spot in the center where it waits for a hapless insect.

The large female is nearly four times the size of her mate, who constructs imperfect webs nearby in the middle of the summer. Mating takes place with maturity and in September the eggs are laid in large pear-shaped cocoons with a brown paper-like surface, hung by threads in the grass and bushes.

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