

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

⚙️ **WIDE-ANGLE LENS** for 16mm cameras and projectors lets avid home-movie fans film pictures in CinemaScope. Adaptable to the projector, this high-quality professional lens fills a panoramic screen more than two and one-half times as wide as it is high.

Science News Letter, July 24, 1954

⚙️ **HOBBY WORKSHOP** contains more than 150 tools for model building, wood carving, leather work and other crafts. These tools are housed in a cabinet 11 inches deep. The cabinet unfolds to provide a large working surface and has more than five cubic feet of extra storage space.

Science News Letter, July 24, 1954

⚙️ **MICROPRINT READER**, designed for those who want quick access to volumes of printed matter, magnifies the microfilm image 22 times and casts it on an 8¾- by 10½-inch screen. The screen is inclined so that the user may assume a natural reading posture. Microprint cards up to 8 by 14 inches may be used with the unit.

Science News Letter, July 24, 1954

⚙️ **TOY TRACTOR**, equipped with a powerful electric motor, runs forward and backward, fast or slow, turns on a dime, and does real bulldozing on a sandbox scale.



By remote control, Junior directs the maneuvers of this model of a diesel machine, shown in the photograph.

Science News Letter, July 24, 1954

⚙️ **COMPASS AND** map-measure is a combination device to measure distances on a map and to show direction. To find the distance from one point to another, a motorist rolls the device along the highway map

and reads the mileage from a dial. Vacationists exploring new territory may find the compass handy when they take the wrong road.

Science News Letter, July 24, 1954

⚙️ **FISHING KIT** does many not-so-pleasant fishing chores by power. It scales fish, sharpens hooks and knives, ties flies, polishes tackle and cleans reels. The equipment comes in a steel case, 9 by 4 by 2½ inches.

Science News Letter, July 24, 1954

⚙️ **ALPHA RAY** detector could have tremendous civil defense utility in case of an atomic attack. Its low price brings it within the budget of every family. It also is useful in the laboratory. About the size of a pocket knife, the device has a chemically-treated screen that registers a series of flashes when the examined item is "hot."

Science News Letter, July 24, 1954

⚙️ **WINDSHIELD WIPER** ensemble has been designed for the wrap-around windshields of some 1954 cars. These severely curved glasses often have bad-weather corners that obscure vision and defy ordinary wipers. The new wiper sweeps into these blindspots and can be installed on the existing wiper pivot.

Science News Letter, July 24, 1954

Scientific Instruments You Can Make

How teen-age scientists have designed and built various scientific instruments. References guide the reader to research in the fields opened by use of these instruments.

Astronomical Instruments

Spectroscopes

Tesla Coils

Oscilloscopes

Cloud Chambers

Atom Counters

Van de Graaff Generators

Electronic Computers

Stroboscopes

Ultrasonics

Chromatography

Photomicrography

Mathematical Constructions

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Do You Know?

Nearly two and one-half times as many traffic deaths occur on rural highways as on city streets.

The average person's hair grows half an inch per month; young persons' hair grows faster than the hair of their elders.

In World War I, it took fighter planes an hour to climb 6,000 feet, but today Navy carrier-based fighters can reach 10,000 feet in less than two minutes.

Nearly 13,000,000,000 match books are distributed annually in the U. S.; they carry advertisements of about 260,000 business concerns.

Today's coal mine is often white instead of black, because powdered limestone is sprayed throughout as a safety measure against the spread of an explosion.

Dairy cows, when kept on pasture, eat for an average of nine hours out of every 24; they chew their cuds nearly nine more hours.