

• New Machines and Gadgets •

⚙️ **PAPER DISKS** for magnetic phonograph records are coated with an iron-oxide emulsion, and can be re-used many times if wiped off with a magnet. A disk carrying a conversation can be mailed and then played back to the receiver in an identical recording-reproducing machine.

Science News Letter, November 30, 1946

⚙️ **SPARKPLUGS** have built-in devices for measuring temperatures in the sparking area of the engine. The temperature measuring plug has a central electrode with a hollow center containing a thermocouple using platinum versus platinum-rhodium metals.

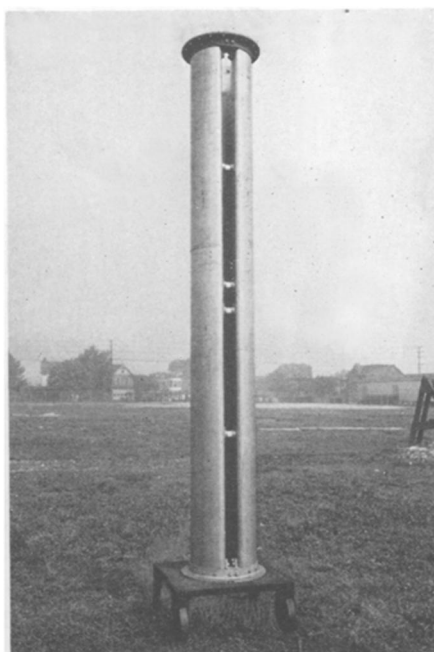
Science News Letter, November 30, 1946

⚙️ **WALKING-TREADS** for ice skates, just patented, are quickly attached with a thumb-nut that grasps the center of the skate blade. The blade fits into a central slot on the upper side of the tread, which has a curved lower surface to facilitate walking when off the ice.

Science News Letter, November 30, 1946

⚙️ **VACUUM CLEANER**, small enough to be kept in the glove compartment of an automobile, operates off the engine manifold vacuum when the car engine is run at idling speed. Connections are long enough to permit the use of the cleaner in any part of the car's interior.

Science News Letter, November 30, 1946



⚙️ **CYLINDRICAL** antenna, a new FM radiator or transmitter, is made of 13-foot units that are 19 inches in diameter, with a narrow slot from top to bottom, as shown in the picture. The cylindrical structure itself is the radiator. The feed line, a single transmission line, runs up the inside along the slot.

Science News Letter, November 30, 1946

⚙️ **SYNTHETIC** adhesive, a thermoplastic composition that does not require vulcanization to obtain adhesive strength,

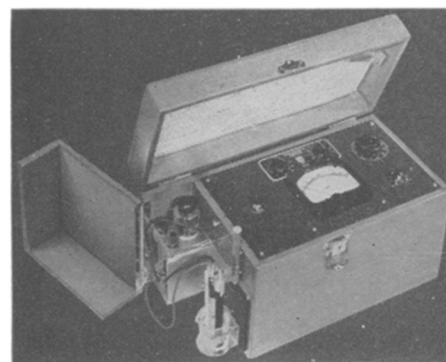
is suitable for bonding Buna-N type synthetic rubbers and vinyl films to rigid surfaces of steel, aluminum, glass, wood or concrete. This cold-setting material dries completely within two hours.

Science News Letter, November 30, 1946

⚙️ **LABORATORY** tongs, to handle hot flasks, beakers and evaporating dishes, have jaws of two parallel wires so curved that they can be used safely to hold glass, ceramic or platinum wares while pouring out the contents. Made of aluminum rod, the handles are large for easy grasping.

Science News Letter, November 30, 1946

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington 6, D. C., and ask for Gadget Bulletin 339. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.



pH INDICATOR FOR "EVERYBODY"

Here's the pH Indicator for the man who is not necessarily a pH expert. It's portable and handy for any lab. It's sturdy and dependable and easy to use.

Instrument can be used with either thick or clear solutions at any temperature to 50C. It's affected neither by "sticky" weather (unless relative humidity is over 95 and ambient temperature is over 30C), nor by the electric fields of other nearby equipment.

Catalog E-96(2) gives further details.

LEEDS & NORTHROP COMPANY 4972 STENTON AVE., PHILA. 44, PA.
LEEDS & NORTHROP
MEASURING INSTRUMENTS · TELLEMETERS · AUTOMATIC CONTROLS · HEAT-TREATING FURNACES

Jrl Ad E-96(25e)

Question Box

AERONAUTICS

How far away can infra-red rays detect a plane? p. 341.

ASTRONOMY

What star will be brightest in the night sky in December? p. 346.

CHEMISTRY

In what form was americium hydroxide isolated? p. 339.

What is the sweetest thing in the world? p. 344.

What new uses of acetylene did the U. S. get from Germany? p. 344.

What will vinyl butyral mean to housewives? p. 345.

ENGINEERING

What is the new process for separating oil and water? p. 344.

ENTOMOLOGY

What is a new use for the Geiger-Muller counter? p. 344.

GEOGRAPHY

How much of Little America has been seen by man? p. 343.

HUMANICS

What obstacles have retarded the science of human relations? p. 342.

PHYSICS

Where does second sound occur? p. 339.

RADIO

What new instrument makes it possible for radio waves to "see" through tile? p. 341.

Where published sources are used they are cited.