

• New Ideas and Gadgets •

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⚙️ **CYLINDRICAL OVEN** for the general laboratory or pilot plant can be quickly converted into a vacuum oven. Useful for drying, aging, curing and moisture determination, the oven temperature range is zero to 200 degrees centigrade. With the vacuum chamber accessory the oven can be used for heating under reduced pressure and special atmospheres.

• Science News Letter, 83:208 March 30, 1963

⚙️ **NEW INKING SYSTEM** specifically for use with precision recording equipment has a refillable plastic ink reservoir, eliminating daily refilling. Fed by capillary action, positive flow over the full chart span without skipping or flooding is assured. The plastic tubing remains flexible at minus 35 degrees, yet is bubble-free at high temperatures.

• Science News Letter, 83:208 March 30, 1963

⚙️ **STEEL MEASURING TAPE** for home mechanics and housewives comes in an encased roll with a non-slip control knob to lock the blade, thus preventing the tape from creeping back into the case. The tape withstands over 100 pounds of pull and the case is provided with a clip for attaching to the belt. Bright yellow with black markings, it is easy to read.

• Science News Letter, 83:208 March 30, 1963

⚙️ **TIRE TREAD REINFORCERS**, shown in the photograph, are tiny metal kerfs



which put vertical ridges inside the grooves of truck tires. Besides making the tires more rugged, the ridges keep out small stones and increase wear by reducing the squirming action of tread elements as they contact the road. The new tread pattern and a new wear-resistant rubber produce a tire that has averaged 32% more mileage than other similarly priced tires.

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⚙️ **COLOR-CHANGE STERILIZING BAGS** have imprints on the bags that change color when exposed to the heat of the autoclave, thus making sterilized material readily identifiable. The bags come in several sizes for sponges, needles, forceps and other instruments. There are also bags with two compartments so that the syringe plunger and barrel can be sterilized together.

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⚙️ **POULTRY CAVITY CLOSER** simplifies closing the cavity of a fowl after stuffing. Consisting of an aluminum plate and a stainless steel spring, the device is placed in the opening of the cavity after the stuffing has been inserted. The spring is released and the cavity is automatically sealed, eliminating the need for sewing and poultry nails.

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⚙️ **SPORTSMAN'S FISH KNIFE** has been designed for fish cleaning and filleting with a proper combination of balance, flexibility and thinness. Hard enough to cut glass, the six-inch blade is unbreakable in normal usage and rustproof. Its plastic handle, which floats, is shaped to the fingers for safe gripping. It comes in a protective sheath-like cover.

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• Doctors Are Reading •

Survival After Stroke Depends on Age

➤ **PERSONS** between 70 and 90 years of age made up 50% of adults dying of stroke, a report in the Journal of the American Medical Association, 163:921, 1963, stated.

The 100 patients all had had blood clots in the brain, or cerebral thrombosis, without hemorrhage. During the first six months following stroke, 35% in all age groups died.

Anticoagulant drugs were warned against in most cases, especially those with high blood pressure, because of the danger of hemorrhaging.

Drs. Frank A. Howard, Phin Cohen, Roger B. Hickler, Simeon Locke, Thomas Newcomb and H. Richard Tyler reported on the 100 adult cases in Boston hospitals.

Sudden Murderers

The "sudden murderer" is typically a young man from a closely knit family in which the mother is a domineering, overprotective person who emphasizes conformity to the rules of the social system. A report on 43 first-time murderers in the Archives of General Psychiatry, 8:289, 1963, indicated that a trivial provocation can sometimes prompt an apparently well-adjusted person to commit an intentional murder.

The sudden murderer fails in his attempts to conform because

of underlying feelings of inadequacy and hostility, the researchers said. Even though he appears to be getting along quite well, he becomes more and more tense and angry.

Drs. Nathan Blackman, James M. A. Weiss and Joseph W. Lamberti reported the study, which was made at the Social Maladjustment Study Unit of Washington University, St. Louis, Mo.

Alarmless Awakening Means Enough Sleep

Individuals differ on how much sleep they need, but a simple test is to be able to wake up at the usual time without an alarm clock. Dr. Nathaniel Kleitman of Santa Monica, Calif., said in the questions and answers section of JAMA, 163:982, 1963, that improvement in performance by workers was shown progressively with each hour up to six hours' sleep. He tested persons between three and five o'clock in the afternoon. But there was little improvement when the workers had slept from six to eight hours and none from eight to ten hours.

Another question, on coffee and insomnia, was answered by Dr. Jack Arbit of Chicago, who said coffee might actually relax an anxious, tense individual.

The effects of coffee depend upon the amount, the time elapsed after it is taken, the size of the individual, his physical condition and his psychological expectations, Dr. Arbit explained (p. 983).

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