

• New Ideas and Gadgets •

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⚙️ **AIR PUMP** that is powered by automobile battery through the cigarette lighter receptacle, is useful for inflating air mattress, inner tubes, toys, rubber boats and outdoor pools. The pump shuts off automatically when the proper air level is reached in the item being inflated. Provided with nylon pistons, the unit never requires oiling. It weighs 2¼ pounds.

• Science News Letter, 88:172 September 11, 1965

⚙️ **MICROFILM READER**, a small and lightweight unit, is useful for reading microfilm as well as sheet film up to 5x8 inches in size as well as 16mm- and 35mm-roll film. Powered by standard electrical outlets, it is suitable for home, office or library. It is adjustable both vertically and horizontally and magnifies either 11x or 22x. The reader folds into a 9x13x17-inch carrying case.

• Science News Letter, 88:172 September 11, 1965

⚙️ **PRINT CENTERING COMPUTER** is designed to simplify centering and mounting of prints, eliminating tedious measuring and experimenting with spacing. The device, which gives a choice of three margin ratios, can be set quickly for aligning and centering photographs or art prints. Instructions are included.

• Science News Letter, 88:172 September 11, 1965

⚙️ **TWO-WAY RADIO**, shown in photograph, helps provide traveling safety. De-



signed as an aid to motorists who require assistance on highways, the completely transistorized citizens band radio allows immediate contact with the highway emergency location plan (H.E.L.P.). When trouble develops, the selector is turned to channel 9, the microphone button pressed and H.E.L.P. requested. The unit is mounted beneath the car dashboard.

• Science News Letter, 88:172 September 11, 1965

⚙️ **KING-SIZE MAILBOX** 16 x 11½ inches in size takes magazines without folding and is large enough to receive newspapers. Fully weatherproof, the mailbox is made of heavy gauge aluminum finished in baked-on enamel. Its cover, designed to shed snow and rain, keeps mail dry and safe from wind and bad weather. It is available in white, bronze, black and aluminum colors.

• Science News Letter, 88:172 September 11, 1965

⚙️ **EXERCISE SHOE** helps strengthen and rehabilitate leg muscles. Made of hard plastic, the exercise shoe, useful to athletes and others who need to strengthen their leg muscles, weighs four pounds. Additional weight can be added by inserting a small dumbbell near the heel of the shoe. Shaped somewhat like a sandal, the shoe is strapped on at the base of the toes and at the heel.

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⚙️ **ROCK COLLECTION** useful to schools or individuals for studying and comparing rocks of various geographical regions across the United States, contains 32 different mineral specimens. The rocks, separated into eight trays, are correlated to a color chart mounted inside the box cover. Each specimen is described and the physiographic region in which it may be found is given. A teacher manual is included.

• Science News Letter, 88:172 September 11, 1965

• Doctors Are Reading •

Dental Decay Hereditary in Rat Experiment

➤ **DENTAL DECAY** can be inherited, at least in animals.

Differences in the mating habits of rats and men make application to humans impossible, but researchers at the National Institute of Dental Research, Bethesda, Md., reported that genetic factors are involved in a double mating of experimental rats.

With rats, members of the same litter can have different fathers. In a double mating experiment of one white female rat with two different strains of fathers, the white Osborne-Mendel and the NIH black rat, the Osborne-Mendel rats developed significantly higher levels of caries than their cross-bred littermates.

Dr. Rachel H. Larson and Mildred E. Simms reported the double-mating tests in *Science* 149:982, 1965. They are making additional studies to further identify inherited factors that may contribute to their findings.

The two strains of rats developed widely different levels of decay even though they were exposed to identical environments during the period within the womb, preweaning and experimental periods. Double mating has also been used to study genetic factors in hamsters.

Thymus DNA Experiment in Leukemia Promising

A promising new experiment with mouse leukemia showed that thymus deoxyribonucleic acid, or DNA, prevented the growth of tumors in as many as 19% of the experimental animals.

Two Princeton University biologists, Dr. J. Leslie Glick and Allan R. Goldberg, reported in *Science* 149:997, 1965, that it is

“most unusual” that a natural molecule such as thymus DNA could prevent the growth of so many tumors. Dr. Glick said the experiment had been performed in the test tube.

“The problem of getting DNA to penetrate live cells,” he said, “makes work with live animals difficult. Any human application is purely speculative.”

The researchers used LI210 leukemia cells that had previously been incubated with thymus DNA. Leukemia-cell DNA did not affect tumor growth under similar conditions.

Heart Drug Questioned After Patient Dies

A well known heart drug has been declared dangerous.

One patient died and five others fainted after taking the drug quinidine. These were the reasons given for caution if not suspension of its use.

Direct current shock therapy is safer, three physicians in the cardiac department of King's College Hospital, London, reported in the *British Medical Journal* Aug. 28, 1965.

Since quinidine was introduced in 1918, it has remained the drug of choice for the correction of certain irregularities, heart flutter and for other symptoms of abnormal behavior of the heart. Only in the past two years has its position been challenged by the development of direct current shock therapy.

Due to the present study of quinidine's effect on six patients, it should only be used as a preventive of paroxysms until a safer drug is discovered, reported Dr. Paget Davies, Dr. Samuel Oram and David Leak.

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