

RADIO SPECTRUM CONSERVATION: A Program of Conservation Based on Present Uses and Future Needs—Joint Technical Advisory Committee, IRE - RTMA—*McGraw-Hill*, 221 p., illus., \$5.00. A group of engineers, who have developed this ideal allocation plan for space on the air, present it in non-technical language for non-professional readers.

SCIENCE NEWS 25—A. W. Haslett, Ed.—*Penguin*, 128 p., illus., paper, 50 cents. Another of these interesting British collections of articles on various scientific subjects.

SEMIMICRO QUALITATIVE ANALYSIS—Paul Arthur and Otto M. Smith—*McGraw-Hill*, 3d ed., 285 p., \$4.00. The first edition of this textbook was enlarged and revised to incorporate ideas received in response to questionnaires sent to teachers. It now contains much more theory.

WHAT WE CAN DO ABOUT THE DRUG MENACE—Albert Deutsch—*Public Affairs Committee*, 32 p., illus., paper, 25 cents. One method of attack on the narcotics problem is to clean up our slums; another is to tighten the controls on sleeping pills.

Science News Letter, October 25, 1952

TECHNOLOGY

Industrial Video Holds Great Future Promise

► THE UNBLINKING eye of television is being used in industry to cut costs, to reduce accidents and to lower capital investment. Under certain conditions, it also provides more information than can be gained by direct observation.

Speaking to the American Institute of Engineers meeting in New Orleans, G. Holmes Wilson of the Diamond Power Specialty Corp., said the Utiliscope, the heart of industry's video system, now is used in 200 industrial applications. New jobs are being found for it so fast that it seems to have an even greater potential than commercial television, he said.

The Utiliscope is less sensitive and less complicated than commercial television apparatus. Known as a "long-life, cold cathode tube," it needs no filament or electron gun.

Although industrial television still is in its infancy, Mr. Wilson predicted that it soon would be used by guards to watch remotely located plant gates, to identify employees, and perhaps even to regulate vehicular traffic.

L. M. Exley, a Long Island, N. Y., Light Co. engineer, reported that his company is using television to watch the furnace in its Port Jefferson steam plant. Placed in an opening at the top of two pulverized-coal and oil-fired furnaces, the camera shows furnace changes that occur during different stages of fuel combustion. The camera lenses are protected by water- and air-cooled glass.

In addition to yielding more information about furnaces in operation, the video system also has helped the company train men who have little opportunity to see what happens in a lighted furnace, he said.

Science News Letter, October 25, 1952

MEDICINE

You Can Catch Measles in 10 Seconds

► YOU OR one of your children could "catch" measles within 10 seconds, if conditions were right. The conditions would be such that a susceptible person was in close proximity to a measles patient during the stages of the disease when it is most contagious. These stages are just before and immediately after the rash appears.

The time it takes to be infected with measles is given in the *Journal of the American Medical Association* (Oct. 11) in answer to a question from a doctor. The doctor also asked whether there was any reason not to expose a healthy child to measles, if the child had been given gamma globulin.

This material from blood contains the anti-measles substances built up during an attack of the disease. Since most grown-ups in the United States have had measles, the blood now being collected through the National Blood Program has plenty of the anti-measles substances. Scientists have found a way of separating this from the rest of the blood and doctors are using it to protect children.

Gamma globulin modifies an attack of the disease, making it less severe and for this reason it is given to small children, or those who have just recovered from some other sickness and would be less able to stand an attack of measles.

Even so, the medical journal states, it is not advisable to expose a child to measles. Very rarely, serious complications develop with "mild measles."

Among complications of measles are the ear infection called otitis media, mastoid infection, pneumonia, bronchitis and occasionally encephalitis.

Science News Letter, October 25, 1952

TECHNOLOGY

Plastic Die Stamps Out Steel Truck Paneling

► SEVERAL HUNDRED steel cowl panels for Dodge trucks have been stamped out in Detroit by a plastic die attached to the powerful jaws of a standard 100-ton press, the Chrysler Corporation has announced.

Engineers adapted the plastic die principle to the automotive business after it had been successfully used in the aircraft industry to stamp out aluminum and stainless steel airplane parts.

Contrasted to the die it replaces, the plastic die weighs 1,500 pounds instead of 6,000. It took less than three weeks to build, whereas the usual high-alloy steel die requires about 15 weeks.

Made of a thermosetting liquid phenolic plastic, the die was formed from a plastic mold. Cold liquid plastic was poured into the mold and allowed to set. Then it was coated with a thickness of wax equal to the thickness of the metal to be stamped, and a mating die was made from the coated original.

Science News Letter, October 25, 1952

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