Myra Stillman-Whittlesey House, 143 p., illus. by G. Schrotter, \$3. About measuring, bending, bouncing and separating light.

THE WONDERFUL WORLD OF TRANSPORTATION Laurie Lee and David Lambert-Garden City Bks, 93 p., illus., \$2.95. Shows youngsters man's many methods of transportation in different places and times.
• Science News Letter, 78:428 December 24, 1960

Do You Know

Congress voted \$100,900,000 for the 1961 budget of the National Institute of Mental Health, a 40% increase over the 1960 appropriation.

About 200,000 people die from strokes each year in the United States.

Meteorites probably strike the earth at the rate of 160 per year, including those which fall into the ocean.

Only three percent of land on the earth's surface is useful for food production.

• Science News Letter, 78:430 December 24, 1960

FREE CATALOGUES OF SCIENCE BOOKS

State your interest! Mathematics, physics, history of science, general science, biology, social sciences, earth sciences, chemistry, languages, philosophy, engineering. Dover publishes over 100 books per year; quality production standards, priced for your budget. Dept. SNL. DOVER, 180 Varick St., N. Y. 14, N. Y.



GEM CARBIDE SCRIBER

Tipped with the hardest metal made by man. Stays sharp 50 times longer than other metals. GEM CARBIDE SCRIBER pencils can engrave on hardened steels, metals, glass, gems, ceramics, plastics, etc. USED BY: jewelers, artists, craftsmen, designers, die cutters, glass cutters, machine shops, laboratories and model builders. FREE pocket clip. FREE instructions. Price \$1.50 pp.

HARRY ROSS Scientific & Lab Apparatus

Best Boo

\$1600 Cash Awards plus $40\,\%$, return. All types of manuscripts invited. For Contest rules and details of famous publishing plan, write for free Brochure SN. Pageant Press, 101 Fifth Ave., N. Y. 3

MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).

SNL, 1719 N St., N.W., Washington 6, D. C.

GOVERNMENT SURPLUS RADIOS, RECEIVERS, transmitters, gadgets, parabolic reflectors, infra-red snooperscopes, aircraft, camera lenses. Amazing catalog $10\,\phi$. John Meshna, Malden 48, Mass.

MICROSI.IDES: INSECTS. MARINE LIFE, ZO-ological, Botanical, British Fresh Water Algae. Send for complete list. Free. Esbe Laboratory Supplies, 459 Bloor St., W., Toronto, Ontario, Canada.

NATIONAL GEOGRAPHIC MAGAZINES 1888-1960, any issue. Periodical Service, Box 465-SN., Wilmington, Delaware.

ROCKET BUILDING INFORMATION SHEET. 15 drawings of proven methods, 50 cents. Rockets, P.O. Box 90391, Los Angeles 45, Calif.

MEDICINE

Relief for Bone Cancer

> RELIEF FOR PATIENTS with bone cancer through use of chemicals was reported by the Veterans Administration.

Two types of treatment were given to 19 patients at Hines, Ill., VA Hospital who had cancer of the prostate that had spread widely to bone.

Seven of eight who received injections of radioactive polymetaphosphate, a condensed form of phosphate, showed improvement and relief of pain.

Many of 11 patients with the same cancerous condition, who received a combination of the polymetaphosphate and the female hormone estrogen, were reported showing rapid, complete disappearance of bone pain, weight gain and minimal undesirable effects from the radiation.

Radioactive phosphate has been used for some time in treatment of malignant tumors spreading to bone, but the radioactive polymetaphosphate seems to localize better in the growing bone around the cancerous areas than does the labeled phosphate.

The researchers said the new treatment apparently surrounds the bone cancer with a shell of radioactivity and tends to spare healthy tissue from radiation damage. Further follow-up of the combination estrogen-metaphosphate treatment is planned. The scientists suggested that metaphosphate be tried for other kinds of bone cancer.

They emphasized that the treatment is thought to be palliative only, since the cancer in some cases has become active again after a number of months.

Drs. Ervin Kaplan, I. Gordon Fels, John J. Imarisio and William S. Walsh, with Bruno R. Kotlowski and Joseph Greco, all of the Hines, Ill., VA Hospital, did the research.

Science News Letter, 78:430 December 24, 1960

MEDICINE

Thyroid Cancer Increase

➤ THYROID CANCER is increasing among young children, apparently as a result of radiation treatments for other ailments around the head and neck, according to Dr. George Crile Jr., head of the department of surgery, Cleveland Clinic Foundation.

Dr. Crile said children as young as three years old have had thyroid operations following X-ray treatments for thymus conditions.

"We are not willing to say that the radiation actually caused the thyroid cancer, he said, "but we do associate the cause with radiation."

Dr. Crile said adequate surgery can be performed without sacrifice of important nerves and muscles of the neck. Nodules can be felt in routine examinations that should be made during office visits.

"These nodules should be removed in

young persons especially," he said. "A different type of thyroid cancer is found among

older persons. This is highly malignant."

Dr. Crile said the Cleveland Clinic Foundation in most cases has been able to prevent recurrence of thyroid cancer following surgery and to maintain the endocrine balance of the body by feeding thyroid. The same type of pills are given that persons take who have deficient thyroid but no cancer.

"The incidence of recurrence of thyroid cancer is only one-seventh of what it was when our clinic began this treatment eight years ago," he said.

Dr. Crile was in Washington, D. C., to address a meeting of the St. George Society for Medical Students under sponsorship of the Medical Society of the District of Columbia and the American Cancer Society.

• Science News Letter, 78:430 December 24, 1960

MEDICINE

X-Rays in Leukemia

> X-RAYS of pregnant women do not increase the occurrence of leukemia in their children, a team of British scientists has found, contrary to the results of some United States studies.

A study of 39,166 children in Great Britain, whose mothers had had abdominal or pelvic radiation during pregnancy, showed no evidence that the X-rays increased the occurrence of the cancerous blood disease disproportionately.

Only nine of the children died of leukemia in a 13-year period studied, whereas the "expected" number was estimated to be 10.5.

Records of children born in eight hospitals, four in Edinburgh, Scotland, and four in London, were studied by W. M. Court Brown, Western General Hospital, Edinburgh, and by Dr. R. Doll and A. Bradford Hill, both of the London School of Hygiene and Tropical Medicine, with the cooperation of Drs. D. H. Cummack, Margaret S. King, Eric Samuel, and W. N. Thomson, all of Edinburgh, and R. E. Lawrence, F. Pygott, R. E. Steiner and E. Rohan Williams, all of London. Their report appears in the British Medical Journal, Nov. 26, 1960.

• Science News Letter, 78:430 December 24, 1960