

ELECTROSTATIC GENERATORS

(Van de Graaff Type)



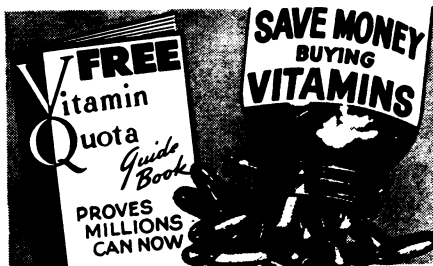
500,000 VOLTS. This model available in kit form is over 3 feet tall and has a 15" diameter spherical charge collector. Kit includes 16" hemispheres, plastic tube, pulleys, bearings, belt, frame, and assembly directions.

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ORNITHOLOGY

Slate-Colored Junco Stays Here for Winter

See Front Cover

THE SLATE-COLORED juncos or snow birds are here for the winter. These well-groomed little birds wearing gray vests, neatly cut off where their whitish under parts begin, are active even on the coldest day of winter. With a little encouragement flocks of them will gather outside a window where bread crumbs or birdseed have been scattered.

When disturbed they all fly up together, flashing the white outer feathers in their tails off and on as if to attract their companions. The white center tail feathers of the junco are described as "banner marks" as are the white tails of the deer and the cotton tail rabbit. Other winter birds, such as tree-sparrows and white crowned sparrows, are frequently seen in company with slate colored juncos.

The photograph on the cover of this week's SCIENCE NEWS LETTER shows a junco perched on the edge of a tree hollow, holding a bit of food in its beak.

Science News Letter, November 21, 1959

ENGINEERING

Cylinder Inside Cylinder Cuts Auto 'Smog' Exhaust

A SYSTEM for cutting smog-producing hydrocarbons exhausted from auto engines has been developed. It uses little cylinders inside the engine's regular cylinders to provide better burning of gasoline.

Developed by Ralph Heintz, a retired engineer, the system cut from five to two per cent the amount of unburned hydrocarbons in the exhaust of an eight-cylinder engine, tests at Stanford University showed.

The system uses continuous fuel injection with combustion taking place in two interconnected chambers. A pre-combustion chamber fits into the spark plug well. This chamber opens into the ordinary cylinder. The small chamber has a separate fuel-inlet valve. The ignited fuel explodes into the larger one in the presence of ample oxygen to insure more complete burning.

Science News Letter, November 21, 1959

MEDICINE

Drug Curbs Gonorrhea, Other Venereal Diseases

AN ANTIBIOTIC that has gonorrhea on the run has been introduced.

It has been reported for more than a year that the gonococcus organism was developing a resistance to the standard treatment, penicillin. Now the cure of this venereal disease by small amounts of DMCT, or Deolomycin demethylchlortetracycline, is described as "noteworthy" and "striking" by two medical researchers.

Drs. Milton Marmell and Aaron Prigot of New York's Harlem Hospital said that for the cure of gonorrhea, the drug can be given in an oral dose almost as small as an injection dose of an older drug, tetracycline.

The investigators reported they treated 62 patients with the drug, developed by Lederle Laboratories, Pearl River, N. Y. All but two were cured, they reported at the Seventh Annual Symposium on Antibiotics meeting in Washington.

The two exceptions were gonorrhea patients who had reported new exposures to the disease after treatment and had probably contracted new infections, they explained.

DMCT was also characterized as "an excellent drug" in the treatment of two other venereal diseases. Four patients with lymphogranuloma venereum, and one with donovanosis, also responded to the drug.

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