

GREGG GILBERT



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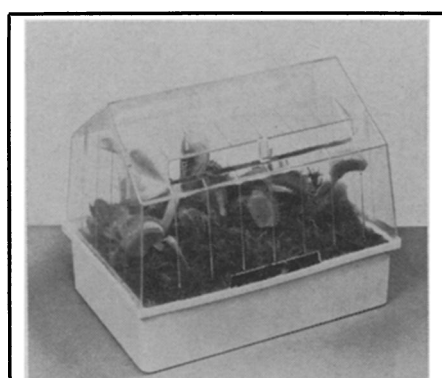
THE WONDERS OF NATURE OUTSHINE THE BRILLIANCE OF MAN—A compact, million-volt impulse generator can deliver in 50 billionths of a second more power than is generated by Niagara Falls, but its power is outshone by a bolt of lightning caught striking the top of the State Capitol dome in Olympia, Wash. Nature's stroke was photographed with a Hasselblad $2\frac{1}{4} \times 2\frac{1}{4}$ single lens reflex camera during a 30 second time exposure at $f/8$ on Tri-X film.

MEDICINE

Cystic Fibrosis Forecast

A NEW DISCOVERY has been made that will let couples know if their children are likely to inherit cystic fibrosis. For the first time a marker has been found in the blood of those diseased children and of parents who already have children with the disease. Its presence in any blood is a danger signal.

It has long been known that cystic fibrosis is the result of a particular set of faulty genes in both parents. But until now no way was available of telling whether the fault was present in the parents or not.



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Now two pediatricians at Duke University School of Medicine in Durham, N.C., Drs. Alexander Spock and Hertha Cress, have found that when suitably concentrated blood fractions of parents of children with cystic fibrosis—those known to carry the genes—are put with tissues taken from the windpipes of rabbits, then the tiny little hairs, or cilia, which these cells possess and which normally beat like an ocean wave, become erratic and beat irregularly.

The irregularity occurs also when the blood samples from children with cystic fibrosis are used. The doctors do not know what in the blood indicates the presence or possibility of transmitting cystic fibrosis. But the results are reproducible, making the test useful.

These cilia, or hairs, are present in the lungs of all animals, including man. They sweep the droplets of moisture and collections of mucus in the lungs to the foot of the windpipe from where they are coughed up.

Their failure to keep the lungs clear of mucus is one of the ways that cystic fibrosis affects those who have it. There are some 25,000 known cases; perhaps many more minor cases go unrecognized.

Germs Dissolve Waste

Billions of *bacteria* perform highly useful jobs in the oil industry by producing chemicals that for example, can help to dispose of wastes.

MEDICINE

Diet Reduces Heart Attacks

EATING FISH five times a week for lunch and dinner for five years has led to a low incidence of heart attacks among New Yorkers in the "anti-coronary" club.

Hypertension and obesity were also reduced among 814 men between 40 and 59 years of age who volunteered for a study to find ways of preventing heart disease.

The anti-coronary club members followed a "prudent diet" prescribed by the New York City Department of Health. In addition to eating lots of fish, they substituted margarine for butter, sherbert for ice cream and soft cheeses for hard. Chicken, veal and lamb were the main meat choices, though one pound of beef or pork was allowed weekly, Dr. Seymour H. Rinzler of the health department reported. A maximum of four eggs a week, one ounce of oil daily and breads and cereals made up the rest of the diet.

Compared to a control group of 463 men of the same ages, the prudent dieters suffered only a third as many heart attacks.

Anti-coronary clubs are springing up in many communities in the United States, Dr. Rinzler said, citing five in New York State, one in Chicago and one in Burlington, Vt., as examples.

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