

# Two-Drug Cure for Leprosy

► **LEPROSY TREATMENT** has been markedly improved by the combined use of two well-known drugs, a Louisiana study of 10 patients afflicted with the skin variety of the disease has shown.

Both drugs, streptomycin and the sulfones, are somewhat effective against leprosy by themselves, but used together their action was more than doubled, reported the U.S. Public Health Service leprosarium in Carville, La.

Drs. Robert C. Hastings and John R. Trautman discovered the treatment by accident. Their patients had been taking sulfones when they were given streptomycin for respiratory lesions. After observing a few short courses with streptomycin, the doctors noticed an improvement in the skin lesions and decided to continue the combinations.

In the four to 10 months since they began the two-drug treatment, all 10 patients improved, as skin scrapings dramatically revealed.

When leprosy germs die, they degenerate into beaded forms. The more beads of bacilli, the more successful the treatment. With sulfones alone, skin

scrapings showed only 24% of the bacilli in beaded form. After one month on the double regimen, the proportion had risen to 54% and by eight months to 99%.

Besides the skin scrapings, improvement was also found in tissue structure and various clinical tests.

Improvement was most obvious in the nodular cases, the doctors said.

There is good reason from previous experience with tuberculosis to believe that the two-drug treatment has special potency. Even though the disease has become resistant to one drug, that same drug will nevertheless delay the emergence of germs resistant to a second drug, the doctors reported in *Medical World News*, July 8, 1966.

CYTOLOGY

## Membranes of Cells Only One Molecule Thick

► **MEMBRANES** of living cells are one molecule thick instead of three layers thick as previously thought, reported Prof. David E. Green of the University of Wisconsin's Institute for Enzyme Research.

Living cells contain interlacing membranes bounded by a delicate cell membrane. These membranes participate in the movement of substances, energy transformations and major metabolic activities, Prof. Green said.

Prof. Green and his group have been investigating the biological chemistry of the membranes of mitochondria, tiny double-membrane structures shaped like pea pods within the cell.

The enzymologists have now firmly established that these membranes have the thickness of one large molecule. Thousands of complex molecules, or repeating units, make up a single membrane.

The repeating units are made up of chemically intertwined proteins and phospholipids. Phospholipids are similar in structure to "stored fat" molecules.

"Each repeating unit of a membrane is made up of a 'basepiece' and a 'knob.' The basepieces form the membrane, and the knobs project from the membrane. All membranes so far investigated possess repeating units of this standard form. The repeating units vary in size and shape from membrane to membrane, but are constant for any given membrane," Green said.

Size and gross structure characteristics of repeating units are readily observed from photographs taken from electron microscopes, he stated.

Prof. Green's biomembrane research is supported by a grant from the National Institutes of General Sciences, of the National Institutes of Health.

# Tiny Computers Can Be Linked With Big Ones

► **A PORTABLE COMPUTER** has been designed to link a person at home, at work or in his car with one of the biggest computers in the country.

Built into two suitcase-sized containers, the unit was developed at Carnegie Institute of Technology, Pittsburgh, to keep roving scientists no farther from the Institute's big computer than the nearest telephone.

The device is called Dataport. It is first plugged into any regular AC outlet; a telephone receiver is placed into the unit's "telephone interface." Then, by simply dialing the phone, the computer operator "calls" the big machine back in Pittsburgh.

The first 16 Dataports will be used by Carnegie Tech. Later, they will be available to schools, industries and private individuals.

## Do You Know?

Scientific tests show that the *noisiest* room in the home is the kitchen.

Building contracts for the construction of one-family houses was 20% greater in March 1966 than in March 1965.

During *sleep* the average person changes position about 45 times, often 60 or more, in a night.

Many *mammals* flatten their ears and close or narrow their eyes when they are startled, in a reflex action to protect the sense organs from injury.

*Vaccines* now protect 12 million children against common measles.

ADVERTISEMENT

## Doctors Trim 2 Inches Off Flabby Waists!

**NEW YORK (Special)**—German doctors at famous Max Planck Institute have discovered an instant-trim method that reduces waistline in 30 days . . . puts you back in shape fast. Called "Isometric Contraction," one 60-second daily workout reduces waistline 2 inches—fast, 10 simple movements can be done at home or at work, anywhere. Acclaimed internationally by coaches, scientists, athletes, used by actors and actresses. Complete Program yours to try for 30 days for only \$1 postpaid. If tape measure doesn't show results, return Program for refund. Send \$1 to **BETTER HEALTH Publishers**, 364 Main St., Dept. D-287, East Orange, New Jersey.

### CLASSIFIED

Classified advertisements are accepted for the following classifications: Books, Business Opportunities, Camps, Colleges, Micro Ads, Personals, Positions Wanted, Services, Travel. All advertisements must be consonant with the character of *Science News*. Rates . . . single insertion 25¢ a word. Minimum charge is \$5.00. Count 2 extra words for Box and Numbers. Classified advertising is payable in advance. Closing date 3 weeks prior to publication (Saturday).

Employment opportunities are accepted at regular display rates, subject to agency commission. Minimum size 1 inch. Minimum charge \$18.90 per inch. Rate cards available upon request.

To speed up insertion, address classified advertising . . . Classified Ads. *Science News*. 1719 N Street, N.W. Washington, D.C. 20036

### MICRO ADS

**FAIRCHILD SEQUENCE CAMERA** \$75.00. Cost government \$650.00. Send 25¢ for our surplus optics-electronics 82 page catalog. Meshna, Nahant, Mass. 01908.

### PERSONALS

**HARPSICORDS.** European Craftsmanship makes the superb Sabathil harpsichord. Write for free catalog: Dept. N, 3911 W 25th, Vancouver, Canada.

**SLIMLINE RUBBER GARMENTS** work on steam bath principle. Briefs \$2.95, short pants \$2.98, chemise \$4.95, brochure 25¢. Boundcraft, P.O.B. 2828SN, San Francisco, Calif. 94126.

**CAN'T SLEEP? NOISY?** Get comfortable Mack's Pillow Soft Earplugs, Guaranteed! \$1.00. Black sateen Shut Eye Sleep Shade, \$2.98. McKeon Products Company, Dept. N, 23220 Ithaca St., Oak Park, Michigan 48237.

**TAPE RECORDING**—Immanuel Velikovsky, author *WORLDS IN COLLISION*. Selected from 1965-66 college lecture series. Approx. 1 hr., 3 3/4 speed. \$7.50 postpaid. Box 132, Princeton, N.J. 08536.

