



AID TO NAVIGATION—*Readying a horseshoe crab's optic nerve for a bath of polarized light, Talbot H. Waterman, zoologist at Yale University, starts cutting out the eye. After separating the optic nerve, he will attach the slender fibers to the electrodes shown resting on the microscope stage. The nerve's reaction to the invisible rays will be of aid in the search for a polarized light compass.*

MEDICINE

Clue to Cancer Spread

► **HOW CANCER** cells spread from one part of the body to other and distant parts may be discovered through a method developed by researchers at Jackson Laboratory, Bar Harbor, Me.

This cancer cell spread, called metastasis, has been produced experimentally for the first time by the new method. The metastasis was produced in a strain of mice normally resistant to a specific transplantable tumor.

The method consists, briefly, in injecting frozen dried tumor material into the mice before implanting the living tumor and then giving the mice injections of cortisone, famous adrenal gland hormone. The cortisone apparently facilitated the mouse body's ability to handle the cancer graft after the injection of frozen dried tissue had first weakened its resistance.

Scientists responsible for this achievement are: Dr. Norman Molmut of the

Waldemar Medical Research Foundation, New York; Dr. David M. Spain of the Westchester County Department of Laboratories and Research, Valhalla, N. Y.; Sidney Gault, research fellow at Jackson Laboratory, and Leonard Kreisler, a summer student at Jackson Laboratory now in his first year at New York Medical College. They report their findings in the *Proceedings of the National Academy of Sciences* (Nov.).

Dr. C. C. Little, director of Jackson Laboratory, calls the achievement a significant and encouraging "milestone of progress." He points out that through the new technique scientists may have better conditions for testing the value of chemicals for treating cancer. They may also be able to learn more about how metastasis starts and is maintained and "perhaps some day how it can be checked or prevented."

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CHEMISTRY

Aureomycin Chemical Structure Discovered

► **THE CHEMICAL** structure of aureomycin, one of the Big Five antibiotic drugs, has now been discovered in Pearl River, N. Y.

Synthesis of this famous mold remedy is now possible on a laboratory scale although a practical synthesis for commercial purposes is said to be "highly improbable."

The discovery of aureomycin's chemical structure by a group of eight Lederle Laboratories scientists, however, can lead to: 1. discovery of how antibiotic drugs work; 2. production of better "wonder drugs" at reduced prices.

Aureomycin is found to have a high oxygen content throughout its molecule. It is also amphoteric, meaning it can combine with both acid and alkaline substances. These two newly discovered features account for the speedy effectiveness of the drug in all parts of the body and its freedom from chronic toxicity effects.

The Lederle scientists who worked out the aureomycin formula are: C. W. Waller, B. L. Hutchings, C. F. Wolf, A. A. Goldman, R. W. Broschard, J. H. Williams, W. J. Stein and P. W. Fryth. The formula is reported in the *Journal of the American Chemical Society* (Oct. 5).

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PSYCHOLOGY

What Men and Women Think of Both Sexes

► **WHAT DO** men think of women? What do women think of men? What do the sexes think of themselves?

The views in each case are surprisingly uniform, according to a study by Drs. Alex C. Sheriffs and Rheem F. Jarrett, psychologists of the University of California. They obtained their material from results of a 58-point questionnaire.

Both men and women think that women excel in faithfulness in marriage, moral character, imagination, poise, and in understanding of the needs of children.

There was pretty uniform agreement, also, that women are more predisposed to insanity, grudges, violent outbursts of temper, and make a greater effort to "keep up with the Joneses."

Both sexes agree that men are more courageous and intelligent, show the greatest emotional balance in crises, are less likely to go into debt, and are more likely to violate the sexual codes.

There was general agreement that little difference could be found between the sexes in the following situations: who is the most courageous in the face of pain, who is the most creative, the poorest losers at sports, the most stubborn in defending a view against overwhelming evidence that it is incorrect.

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