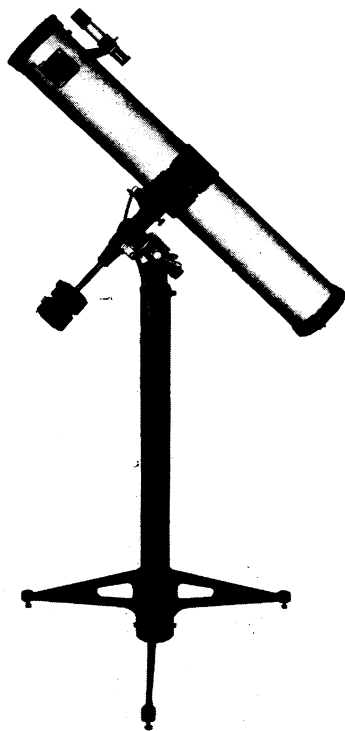


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films OF THE WEEK

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

CRYSTAL GROWTH. 16mm, b&w kinescope, sound, 30 min. Guides the viewer from the beginnings of crystallography to modern studies of crystal defects, and discusses the importance of developing new and improved methods for growing single crystals in the laboratory. Audience: industry, professional groups, high school teachers. Rental \$6.10 or purchase \$100 from Audio-Visual Services, The Pennsylvania State University, University Park, Pa. 16802 (video tape version also available, prices on request).

INSECT PARASITISM: THE ALDER WOOD-WASP AND ITS ENEMIES. 16mm, color and b&w, sound, 18 min. Illustrates the life cycle of the woodwasp and the four parasites that prey upon it. Audience: high school. Purchase b&w \$119 or color \$232.50 from Encyclopaedia Britannica Educational Corporation, 425 North Michigan Ave., Chicago, Ill. 60611.

PERIODICITY I. 16 mm, b&w, sound, 20 min. In order to represent numerical data by means of a conventional graph, it must be possible to organize data into ordered pairs. Discussed in this film are the linear (straight line) graph and the discrete (consists of isolated points only) graph. Also dealt with are different examples of periodic functions, and it builds up the idea of a time graph of such a function. Audience: high school, college. Rental \$12 or purchase \$120 from Peter M. Roebeck and Co., 230 Park Ave., New York, N. Y. 10017 (BBC-TV Production).

PERIODICITY II. 16mm, b&w, sound, 20 min. The tides offer a useful example for the study of periodicity. This film illustrates that the function which describes the tides is not merely a superimposition of linear segments, but is a new function altogether, call the sine function, and explains how the new function is arrived at, as well as its connection with trigonometrical tables. Simple harmonic motion is briefly introduced. Audience: high school, college. Rental \$12 or purchase \$120 from Peter M. Roebeck and Co., 230 Park Ave., New York, N. Y. 10017 (BBC-TV Production).

THE TRANSURANIUM ELEMENTS. 16 mm, b&w kinescope, sound, Part I 58 min. and Part II 70 1/2 min. This two-part professional level lecture by Dr. Glenn T. Seaborg, Nobel Laureate and Chairman of the U. S. Atomic Energy Commission, was produced from a TV tape recorded at the Tenth Anniversary Summer Science School at the University of Sydney, Australia. Dr. Seaborg describes the work leading to the discovery of the known transuranium elements—from element 93 through element 104. The lectures are illustrated with slides explaining the production of the man-made elements. Some practical applications of making even newer, very heavy elements are also discussed. Audience: high school, college, professional. Free loan from AEC film libraries or Audio-Visual Branch, Division of Public Information, Atomic Energy Commission, Washington, D. C. 20545.

TRIO FOR THREE ANGLES. 16mm, color, sound, 7 min. Animated. Presents the triangle as the intersection of three angles, an approach which differs from the usual presentation of a plane figure with three sides. Uses the movements of free-swinging angles, synchronized with music, to help make the student aware of the relationships of the triangle's different components. Audience: elementary, junior high. Purchase \$100 from International Film Bureau, 332 South Michigan Ave., Chicago, Ill. 60604.

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the basis of this particular statement that the action proposed is necessarily moral. The promotion of a most probable natural biological fate, dear to the heart of French moralists who coin the term "renforcement de la nature" can, in logic, lead to extraordinary conclusions. Since it is the probable natural fate of all men to die it might lead to the conclusion that to "promote" this most probable natural fate might be moral, which is at least questionable. The fundamental question remains to what degree, and at point in its development, the fertilized ovum is to be afforded the same dignity as is afforded to other forms of human biological life.

Andre E. Hellegers, M.D.
Professor of Obstetrics
and Gynecology
Georgetown University
Washington, D. C.

Plant drugs defended

Sir:

In the article on "Folklore to Pharmacy" by Barbara J. Culliton (SN: 6/8, p. 558): the discovery of peruvoside, (credited to Dr. Seshadri) was by my old student and my present colleague, Prof. S. Rangaswami. In the article there is undue emphasis on the opinion held by some. There are, no doubt, many scientists in India who express lack of faith in the study of vegetable drugs, but there are many more who hold the opposite view. I could, for example, draw your attention to the opinion of the president of the Indian Pharmaceutical Association published recently in the INDIAN JOURNAL OF PHARMACY, 1968 Aug., p. 178. I may point out that peruvoside is an important discovery and the discovery itself did not cost more than a few thousand dollars. But our chief difficulty in India is the lack of tradition for development and exploitation. Certainly we could seek the help of others more experi-

(see Letters p. 308)

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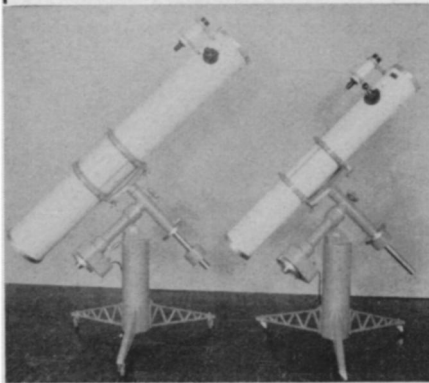
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enced in this matter. But the discovery on that account does not lose its importance.

In regard to the statements that only occasional discoveries of this type are made and they are expensive, I may point out that the intensity of investigation in this field is not high and the percentage of success is not unusually low. Even in the much more popular field of synthetic drugs, success is considered to be one in 4,000 cases. It is certainly much better in the field of vegetable drugs. For a country like India where a large majority cannot go in for expensive medicaments which at the same time are not always safe, the development of vegetable drugs seems to be a matter of importance and urgency.

*Dr. T. R. Seshadri
Department of Chemistry
University of Delhi
India*

Science and meditation

Sir:

In regard to some recent letters in your publication deploring its intellectual plane, I can only say that it must be terrible to fear challenging one's own mind. A university astronomy student, I find SCIENCE NEWS an excellent aid; primarily for its weekly "Physical Sciences Notes," but also as a brief and succinct review of progress being made in other scientific fields. It would be a great help to a professional scientist be he an astronomer or doctor. For those who resent the terrible taxing of constructive thought, there are many science papers written at the sixth grade level. I would be deeply disappointed if SCIENCE NEWS debased itself by lowering its intellectual standards. This would be an adulteration of the true beauty of scientific concepts which always require meditation for a full understanding.

*Steven Randall Spangler
University of Iowa*

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Andrew Gyorgy as he really is. The photograph identified as Gyorgy last week was actually Curt Beck, political scientist at the University of Connecticut.