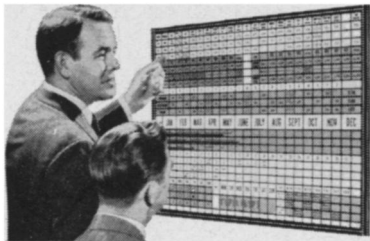


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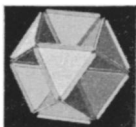
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films OF THE WEEK

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

AIR POLLUTION. 16mm, color, sound, 10 min. Discusses the origins, perils, and possible remedies of the ever-increasing contamination of our atmosphere by both man-made and natural causes. Viewed as a contemporary problem that continues to grow in direct proportion to our industrial progress, air pollution is shown to be the cause of a \$13 million annual loss. Film stresses the need for cooperation between government agencies to effect control. Actual anti-pollution devices in industry and transportation are illustrated, and project long-range controls are introduced for further discussion. Audience: high school. Purchase \$130 or rental information from Journal Films, 909 W. Diversey Parkway, Chicago, Ill. 60614.

ALTERNATING CURRENT THEORY. Super-8mm cartridge, color, silent, series of nine. Films show all currents flowing around the circuit in question, the buildup and decay of significant voltages, and the simultaneous animation of rotating vectors, waveforms, phasors, etc. Subject matter: Series RL, Series RC, Series RLC, Parallel RL, Parallel RC, Parallel LC, Parallel RLC, Basic Transformer Actions. Audience: high school, junior college, college, vocational and adult education. Purchase \$18.50 for series from Animated Electronic Labs, Box 2036, Arlington, Va. 22202.

DESERT PEOPLE. 16mm, b&w, sound, 51 min. Documentary about two aborigine families in the arid lands of Australia. One family is followed through the events of a day and a night as they move from one waterhole to the next. Illustrates the social structure of the family, methods of procuring and preparing food and traditional customs. Audience: high school, college, general. Purchase \$365 or rental \$35 from McGraw-Hill Films, Dept. DF, 330 W. 42nd St., New York, N.Y. 10036. (Produced by Australian Commonwealth Film Unit.)

ELEMENT THREE. 16mm, color, sound, 46 min. Both the beauty and the usefulness of water are shown, but the major emphasis is on the dwindling of this vulnerable element through heedless waste and pollution. Film urges that positive action be taken to preserve water resources. Audience: high school, college, general. Purchase \$395 from International Film Bureau, 332 S. Michigan Ave., Chicago, Ill. 60604. (Produced by National Film Board of Canada in collaboration with UNESCO for the International Hydrological Decade.)

GENETICS: HUMAN HEREDITY. 16mm color or b&w, sound, 13½ min. Useful for illustrating the methods of scientists—especially while investigating human heredity—film may spark student interest in careers in the field. Describes an investigation of the genetic transmission of sickle-cell anemia (biochemical genetics), a study of the degree to which heredity or environment caused tuberculosis in New York (nature-nurture study) and a population survey in Italy to determine the frequency and causes of blood disease (population genetics). Audience: junior high, senior high. Purchase color \$162.50 or b&w \$81.25 from Coronet Films, 54 E. South Water St., Chicago, Ill. 60601.

TOMORROW'S WORLD: FEEDING THE BILLIONS. 16mm, color, sound, 53 min. Illustrates the progress being made in solving the problem of how to feed the world's rapidly expanding population. Includes visits to a huge "fish-farm" and an algae production plant. Audience: junior and senior high school, college, adult. Purchase \$600 or rental \$35 from McGraw-Hill Films, Dept. DF, 330 W. 43rd St., New York, N.Y. 10036.

LETTERS

to the editor

Maxwell

That was a most interesting note about Ben Franklin and how he came to be the first to map the Gulf Stream (SN: 9/7, p. 247). May I add an item concerning Maxwell? He too was an early geophysicist, although the fact may be little known.

Maxwell may have been the first to predict the earth's latitude variation, a prediction later verified by observation. From his studies of the gyratory motions of a spinning top, he concluded that the earth must have a latitude variation, with a period of about 11 months. And so it has. The Doolittles (American geophysicists) later spent years studying the minor and major variations of the earth's latitude. Was Maxwell the first to suspect the phenomenon?

Now many of us picture the earth as a free-space gyroscope which shows all the motions of the familiar toy. Maxwell seems to have been the first to see the resemblance. His paper can be found in the TRANSACTIONS OF THE ROYAL SOCIETY OF EDINBURGH, vol. XXI, Part IV. The paper is entitled, "On a Dynamical Top, for Exhibiting the Phenomena of the Motion of a System of Invariable Form About a Fixed Point, with Some Suggestions as to the Earth's Motion."

Some of the geophysical firsts, such as Franklin's work with the Gulf Stream and Maxwell's study of a spinning top, sometimes have far-reaching effects, some being recognized quickly and others requiring more than a century to be first felt.

Howard Whetsel
Oak Ridge, Tenn.

(The length of the submarine Scorpion is 252 feet, not 819 feet [SN: 11/23, p. 515].)

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