transmission of scenes by the intermediate film process. By means of it a talking film of an event is recorded and subsequently used for vision and sound transmission. The developing, fixing and washing of the film are carried out so expeditiously that there is a delay of only 30 seconds between the film recording and the television transmission.

The Marconi-E.M.I. Television Company, who, with Baird Television are to be invited to supply television senders for the new London station, have television receiving sets ready for the market, but point out that radio sound broadcasting will dominate the programs for many years and that television will not in any way interfere with the developments in radio sound broadcasting with its ever-increasing entertainment value.

EXHIBIT OF MINERALS AT THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

FIFTY minerals, prepared by Miss Mary Allison Reed, of the staff of the Academy of Natural Sciences of Philadelphia, have been placed on exhibition in the mineral hall of the natural history museum.

The minerals, which are displayed on a black felt-covered panel around a road-map which shows the source of the specimens, have been gathered in quarries and mines near Philadelphia and from the rocks exposed along the Wissahickon and nearby streams. Ten localities, typical of those with similar underlying rocks but most prolific of their type, are represented in the collection.

The localities and the minerals are as follows:

(1) French Creek iron mines, 8 miles southwest of Pottstown: pyrite, chalcopyrite, calcite, apophyllite, magnetite, byssolite.
(2) Perkiomenville, Kibblehouse crushed stone quarries: calcite, stilbite, chabazite, natrolite, heulandite, epidote, garnet.
(3) Wheatley lead and zinc mines, 2 miles south of Phoenixville: quartz, calcite, ankerite, galena, sphalerite, fluorite, cerussite, anglesite.
(4) Railroad cut west of Henderson Station (near Bridgeport): quartz crystals, limonite.
(5) Soapstone quarries below Miquon (Lafayette): serpentine, chlorite, dolomite, talc, hornblende, magnetite.
(6) Rocks along Wissahickon, 500 feet north of Devil's Pool: anthophyllite, cyanite, garnet, staurolite.
(7) Vanartsdalen's quarry, 2 miles north of Neshaminy Falls: blue quartz, pyroxene, orthoclase, amphibole, wernerite, wollastonite, graphite, zircon, titanite, apatite, pyrrhotite.
(8) Brinton's quarries, 3 miles south of West Chester: serpentine, albite, magnesite, magnetite, asbestos, clinochlore, jefferisite.
(9) Rocks in creek and hillside of Mineral Hill, west of Ridley Creek (Media): serpentine, deweylite, sunstone, moonstone, amazonstone, chromite, enstatite, actinolite.
(10) Leiper's quarry, Crum Creek near Swarthmore: quartz, microcline (feldspar), muscovite and biotite (micas), beryl, tourmaline, garnet.

AWARDS OF THE AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS

THE American Institute of Mining and Metallurgical Engineers held its annual meeting in New York on February 19 and 20. The Howe Memorial lecture was given by Earl C. Smith, chief metallurgist of the Republic Iron and Steel Company, who discussed the effect of the application of petrography on the production of steel.

An international symposium on geophysics included papers by Rudolph Krahmann and Leopold Reinecke, of Johannesburg, J. G. Sineriz, of the Spanish Geological Survey, and Howard I. Smith, of the United States Geological Survey.

Medals for distinguished work in mining and metallurgy were presented. James MacNaughton, president and general manager of the Calumet and Hecla Consolidated Copper Company, received the William Lawrence Saunders Gold Medal for his work in the field of copper mining.

The James Douglas Medal for distinguished achievement in non-ferrous metallurgy was awarded to George C. Stone, author of numerous papers on this subject and an authority on the extraction of zinc.

The J. E. Johnson, Jr., Award was given to Francis M. Rich, of the Republic Steel Corporation, Youngstown, Ohio, for his work in the development of blast furnace operation under conditions of slow blowing.

Thomas Arthur Rickard, of Victoria, B. C., Canada, received a certificate of honorary membership in recognition "of his outstanding achievement as a proponent and preceptor of advance standards in technical concept and writing, and his brilliant contributions to the literature of geology, mining and metallurgy, as editor, journalist and author."

Six men who have been members of the institute for fifty years received the insignia of the institute's Legion of Honor. They were: Arthur S. Dwight, Arthur L. Walker, H. L. Hollis, L. W. McKay, C. Snelling Robinson and H. H. Webb.

Howard N. Eavenson, retiring president of the institute, presided. Dr. Henry A. Buehler, director of the Missouri State Bureau of Geology and Mines, was elected to succeed him. Other officers elected were: *Vice-presidents,* John M. Lovejoy and Paul D. Merica; *directors,* Dr. Charles K. Leith, Edwin E. Ellis, Wilber Judson, Wilfred Sykes and R. M. Roosevelt.