Mathematics.—Intuitive and descriptive geometry of function space; tensors and bi-vectors. Bruce Longtin and Merle Randall. 485

Geophysics.—Geothermal gradient at Grass Valley, Calif.: A revision with a note on the flow of heat. H. Crook Spicer. 495

Paleontology.—Note on a vertebra of Palaeophis from the Eocene of Maryland. S. F. Blake. 501

Palaeobotany.—Three new species of Musch麦berapia. Charlotte O. Gooding. 504

Botany.—Three new species of Muhlenbergia. Charlotte O. Gooding. 506

Paleobotany.—Pinus and Quercus in the Chesapeake Miocene. Edward W. Right. 509


Obituaries: Hugh McCormick Smith, David I. Bushnell, Jr. 518

Index to Volume 31. 522