

lated. Two structural phases of rocks are specially important in this connection, the *anticline* and the *terrace*. The time has come for the acknowledgment of *structure* in reservoir gas fields even in advance of measurements. The Iola gas field is one of great promise. Its source is in a sandstone of the Cherokee Shales, or near the bottom of the Coal Measures. It proves to be a *terrace* of well marked character. For seven miles the top of the gas rock has an elevation of 131 feet above tide, rising at no point more than 45 feet above this. At this summit, the largest well of the field is located.

One feature brought out in this paper is the great value of natural gas as a fuel. Prof. Orton argues strongly in favour of legislation in order to compel, if possible, the use of natural gas only as a fuel for family or domestic purposes. He considers it too valuable an element altogether to be employed in the baser uses for manufactures.

### **The Mica Industry of the United States, New Mexico, the Rocky Mountains, and North Carolina.**

By Prof. W. H. Holmes, presented his paper

which gave a great deal of valuable information on the mode of occurrence of this important industry.

### **The Newark System in New York and New Jersey—**

By Prof. Henry B. Kümmel, of Chicago, described

a series of strata which are contemporaneous and probably similar in origin to the so-called "New Red" and "Triassic Sandstone" of the Minas Basin, Cornwallis and Annapolis valleys, and elsewhere in the province of Nova Scotia and in Prince Edward Island. Even the intrusive and extrusive trap sheets so characteristic of the New York and New Jersey series in the Newark system also occur in Nova Scotia, especially in the North Mountain region of Kings and Annapolis Counties and in Cumberland and Colchester counties as well.

### **The Archæan-Potsdam contact in the vicinity of Manitou, Colorado.**

By Prof. W. O. CROSBY, of Boston, was of special interest to Canadians. The peneplain mentioned by Prof. Crosby, in early times may apply to the region he describes in Colorado, but not in Eastern Ontario or Western Quebec, in Canada, where the underlying rocks of Laurentian and Huronian age are deeply cut and furrowed by hundreds of feet prior to deposition of the Potsdam. The question may be asked: Are the so-called Potsdam rocks of Manitou truly equivalents of the Potsdam of New York State and Canada?

H. M. AMI.