Petroleum in 1934

This volume contains papers and discussions presented before the Petroleum Division of the American Institute of Mining and Metallurgical Engineers at the Los Angeles (September 29, 1933), the Dallas (October 6 and 7, 1933) and the New York (February 19 to 22, 1934) meetings. For necessary clearness these papers are grouped in five chapters. Chapter I considers "Production Engineering and Engineering Research," with 14 papers (100 pages). To mention four important contributions in this chapter: "Properties of Hydrocarbon Mixtures as Related to Production Problems," by W. K. Lewis, in which he shows that by appropriate technique the volume of both gas and oil in the crude flowing from a well can be calculated as a function of the pressure at the point in the producing sand, provided one knows the sand temperature. This being the case it should explain the high gasoline content of high pressure gas caps. A second paper, "A Theoretical Analysis of Water-flooding Networks," by M. Muskat and R. D. Wyckoff, in which the theoretical efficiency of staggered line drive, direct line drive, five-spot, and seven-spot methods of flooding with water to force the oil out into predetermined producing wells is considered. A third, "Recent Changes in Reservoir Pressure Conditions in the East Texas Field," by G. L. Nye and C. E. Reistle, Jr., who endeavor to show that the reservoir pressure is dependent on the rate of production and that with slow production the total recovery would be greater due probably to the slow vertical flooding by natural waters. A fourth, "Basic Data for Oil and Gas Wells," by L. J. Pepperberg and E. A. Stephenson; with an excellent bibliography of 84 titles. Chapter II is "Petroleum Economics," covering 40 pages with six papers, two of which are (1) "Tanker Rates and Canal Tolls as Factors Determining Markets of Foreign Oils," by V. R. Garfias, with comprehensive tables showing costs; and (2) a table, "World Petroleum Consumption," by V. R. Garfias and R. V. Whetsel, covering from 1931 to 1933 inclusive, showing a grand total of 1,386,291 thousand barrels consumed in 1933. Chapter IV (278 pages) covers world production of Petroleum for 1933. The production is given country by country by various authors. The tables include much more detailed information than before; a procedure which is to be followed in the future. Chapter V contains a paper by W. Miller, "Developments in Refinery Engineering during 1933," which is a summary of Refinery development during the year.

This useful volume is a necessary part of all those interested in Petroleum. To those familiar with this series nothing need be said; to those unfamiliar with it, it may be stated that these volumes represent the cream of the Petroleum papers from the Economic and Industrial end.—WILLARD BERRY.