

diameter. The presence of silts and muds on the bottom in certain areas of highest observed velocities indicates that these eddy currents are not competent to prevent all deposition. Since evenly distributed eddies cannot alone produce any net transport, other factors such as the gravitational component down slope and steady weak currents must cooperate in preventing deposition on certain areas of rocky bottom and in transporting débris to the regions of accumulation.

11. FRANCIS D. BODE, California Institute of Technology: Geological Observations in Italian East Africa (abstract).

Topographically and geologically, Italian East Africa can be divided into three principal areas: (1) the "Ethiopian Plateau" which occupies the northwestern third of the country; (2) the "Rift Valley depression" which divides the entire country in two; and (3) the "Somaliland Plateau," the country south and east of the Rift Valley.

The Ethiopian Plateau consists of a series of tablelands, in many places of great elevation, with ranges of high and rugged mountains dispersed across its surface in rugged confusion. This high land area is composed of a thick series of lava flows which rest either on old plutonic rocks or upon a thin section of Mesozoic sediments.

The Rift Valley depression is a long, and generally narrow, trough which trends in a northeasterly direction across the country from the southwest corner of Abyssinia to near the junction of the Red Sea and the Gulf of Aden. Toward the northeast, the trough widens and the scarps which form its sides become continuous with those on the eastern side of the Red Sea and the south side of the Gulf of Aden. For the most part, the floor of the depression is covered by lava flows of Tertiary age.

The Somaliland Plateau is a great area of monotonous relief which slopes very gradually, from elevations near 5,000 feet along the Rift Valley and the Gulf of Aden, southeastward to the Indian Ocean. Most of this plateau is covered by sediments of Mesozoic and early Tertiary age.

12. Informal Symposium on Recent Petroleum Discoveries in California.

These are extemporaneous papers on areas of current interest and they are not intended for final publication at this time. Discussion is invited but deference should be given to the fact that insufficient information is available on many of these for final conclusions to be reached.

A.—L. S. CHAMBERS, Seaboard Oil Company: East Coalinga and Amerada Area.

B.—R. ECKIS, Richfield Oil Company, and G. GARIEPY, Ohio Oil Company: Coles Levee Oil Field.

C.—R. W. CLARK, Western Gulf Oil Company: Paloma Field.

D.—F. A. MENKEN, Tide Water Associated Oil Company: Strand Oil Field.

E.—J. R. DORRANCE, The Texas Company: South Mountain view Field.

F.—C. E. LEACH, Tide Water Associated Oil Company: Aliso Canyon Field.

G.—VERNON L. KING and H. M. PRESTON, consultants: West Montebello Field.

H.—J. R. DORRANCE, The Texas Company: Summary of Development Northern California Gas Fields.

At the annual meeting of the Pacific Section of the Society of Economic

Paleontologists and Mineralogists on November 9, the following paper was presented.

BORIS LAIMING, The Texas Company, Los Angeles: Some Foraminiferal Correlations in the Eocene of San Joaquin Valley, California (abstract).

In this paper the author presents evidence to prove the value of the smaller foraminifera as a basis for correlating Eocene strata in California.

A study of foraminiferal sequences in a number of sections taken from widely separated areas shows that the general order of superposition of micro-faunal assemblages remains constant, even in the presence of variable lithologic conditions.

Charts are presented indicating the position and correlation of foraminiferal zones and formations in various surface and subsurface sections of the Eocene in San Joaquin Valley. Comparison is also made with Eocene formations in other localities.

The vertical ranges of the faunal assemblages and of some characteristic species are shown in a graphic chart.

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#### NATIONAL RESEARCH FELLOWSHIPS

W. A. VER WIEBE

Wichita, Kansas

According to an announcement dated October 16, 1939, the National Research Council has appointed 24 Research Fellows for the ensuing year. Four of these are in the division of Geology and Geography. As usual the individuals selected all have a Ph.D. degree and are under 35 years of age. The period of appointment is for one year only and reappointments are made only in very exceptional cases. The stipend is \$2,000 per annum, payable monthly in advance.

These fellowships are awarded to persons who have demonstrated a high order of ability in research, and are intended to permit the individuals to continue work along some special problem. The Rockefeller Foundation has furnished the National Research Council with an appropriation which provides for a limited number of fellowships each year.

The persons selected for the coming year are John N. Adkins who secured his Ph.D. in seismology at the University of California; Daniel Axelrod, who has a degree from the same university in the field of paleobotany; John B. Peterson, who received a Ph.D. degree in the field of soil fertility from Iowa State College; and George P. Woollard, who majored in structural geology at Princeton University and was awarded a Ph.D. degree in 1937. Dr. Woollard will continue his investigations on the geologic structure of the Atlantic Coastal Plain by means of seismic and gravity profiles.

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#### PROSPECTING IN THE NATIONAL ECONOMY<sup>1</sup>

HENRY A. LEY

San Antonio, Texas

What is petroleum prospecting and what has it to do with the petroleum industry and our national economy? Is it an appendage to the oil industry

<sup>1</sup> Presidential talk before the Pacific Section of the Association at its annual meeting, November 9, at the Ambassador Hotel, Los Angeles, California.