geology and zoology. These will provide a quick, convenient survey of the most striking features for the visitor who has but little time to spare. The guide lecturers conducting the parties will give informative talks before each of the exhibits.

On the other days when guide-lectures are to be given—Mondays, Tuesdays, Wednesdays and Fridays—individual sections of the museum will be studied, each subject being treated in more detail. Each month a schedule will be drawn up and announced, so that the person with specialized interests may come when his subject is to be taken up. Eventually, under this plan, all sections of the museum will receive this specialized study treatment. Persons with a variety of interests may profitably attend a large part or all of the lectures. Students of high schools, colleges and universities are expected to find the guide-lecture courses particularly valuable as a supplement to their regular studies.

Following is the schedule of guide-lecture tours for December, in addition to the Thursday general tours:

Dec. 2-11:00 A.M., Eskimos. 3:00 P. M., Systematic mammals. Dec. 5-11:00 A.M., Northwest coast Indians. 3:00 P.M., Precious and base metals; building stones. Dec. 6-11:00 A.M., Woodland Indians. 3:00 P.M., Plant life. Dec. 7-11:00 A.M., Great plains Indians. 3:00 P. M., North American and African game animals. Dec. 9-11:00 A. M., California Indians; nomadic tribes of southwest. 3:00 P. M., Petroleum, coal, clays, sands. Dec. 12-11:00 A.M., Sedentary tribes of southwest. 3:00 P. M., Skeletons. Dec. 13-11:00 A. M., Archeology of Mexico. 3:00 P. M., Economic botany. Dec. 14-11:00 A. M., South American Indians. 3:00 P.M., Systematic minerals and meteorites. Dec. 15-11:00 A. M., Melanesia. 3:00 P.M., Fish and reptiles. Dec. 19-11:00 A. M., Italian archeology. 3:00 P. M., Physical geology.

Dec. 20-11:00 A. M., China.

3:00 P. M., Gems.

Dec. 21—11:00 A. M., Tibet.

3:00 P. M., Marine invertebrates.

Dec. 23-11:00 A. M., Children's toys of the world.

3:00 P. M., North American trees.

Dec. 27-11:00 A. M., Reindeer and relatives.

3:00 P.M., Life of birds.

Dec. 28-11:00 A.M., Historical geology.

3:00 P. M., Textiles.

Dec. 30—11:00 A. M., Pewter and glass. 3:00 P. M., Systematic birds.

THE CLEVELAND MEETING OF THE GEO-LOGICAL SOCIETY OF AMERICA

THE official program of the mid-winter meeting of the Geological Society of America, to be held in Cleveland, December 29, 30 and 31, has been issued. Three affiliated and closely associated societies, the Paleontological Society, the Mineralogical Society of America and the Society of Economic Geologists, will hold meetings at the same time and place. Section E of the American Association for the Advancement of Science, which will meet at Nashville, announces its program also with this geological group, although its meetings are separate this year.

The program is expected to occupy three days, with almost continuous sessions and many sectional meetings. One hundred titles are listed on the geological society program alone, and the total of the four societies meeting at Cleveland will exceed one hundred and fifty, representing studies in nearly all branches of this earth science.

Major interest this year centers around large tectonic problems as represented by the symposium on "New Data on North American Structures." No less than twenty-five papers deal primarily with structural questions.

The principal addresses will be as follows:

Arthur Keith, president of the Geological Society of America, "Structural Symmetry of North America."

William A. Parks, president of the Paleontological Society, "Some Reflections on Paleontology."

Austin F. Rogers, president of the Mineralogical Society of America, "Natural History of the Silica Minerals."

Frederick L. Ransome, president of the Society of Economic Geologists, "Directions of Progress in Economic Geology."

The annual dinner will be held on Friday evening, December 30, at the Hotel Cleveland, at which time the newly established Penrose medal for distinguished achievement in geologic science will be awarded.

CHARLES P. BERKEY,

Secretary

PRESENTATION OF THE ROYAL SOCIETY MEDALS

The awards of the Royal Society Medals have already been recorded in Science. Sir Ernest Rutherford, president of the society, in presenting the medals to Professor A. A. Noyes, Dr. W. D. Coolidge and Professor J. C. McLennan made the following citations:

The Davy Medal, awarded to Professor Arthur Amos Noyes

Professor Noyes's researches have been chiefly concerned with the properties of solutions, in particular of