northwest. Thus the sections of special interest to students and teachers of anthropology are fairly segregated though within easy reach of the impressive display of the achievements of modern man in the large exhibit palaces.

Among the special lines of opportunity for original and instructional work the following may be noted:

1. Somatology; the comparative study of physical types representing many distinct peoples.

2. Psychology; the study of psychic characteristics, both experimentally and through habitual conduct and expression.

3. Arts and industries; the comparative study and record of manual operations and their products among typical peoples.

4. Languages; the record and comparison of scores of distinct tongues, covering the entire range from the most primitive known to the most highly advanced.

5. Law and socialry; the comparative study of all known culture-grades as defined in terms of social organization.

6. Faiths and philosophies; the study and comparison of many widely different systems of thought, ranging from the simplest upward.

7. General ethnology; the comparative study of over a hundred distinct tribes and peoples (those brought in by the department including the Ainu, Patagonians, Pygmies, 'Red Africans,' Cocopa Indians from Baja California, Klaokwaht Indians from Vancouver Island, and over a dozen tribes of United States Indians, and the Philippine exhibit including all the leading tribes of the Archipelago).

8. General anthropology; the comparative study of primitive and advanced peoples in an unexampled assemblage of race-types and culture-grades.

9. Record work; the making and preservation of records including lists and tables of measurements, sketches and diagrams, photographs, life casts, life models, paintings, sculptures, etc.

The attention of educational institutions is especially invited to the opportunity for establishing and maintaining field schools in connection with the exposition. Every possible facility will be afforded not only by the chief of the department but by the director of exhibits and the exposition authorities generally for the satisfactory conduct of such schools.

The attention of museum officers is especially invited to the opportunities for obtaining direct representations of ethnic and other types of mankind at but a fraction of the cost ordinarily involved.

Should university, college and museum authorities signify a desire to utilize the opportunities afforded by the department, plans will be framed with the view of coordinating the requirements of all and affording each the largest facilities consistent with the demands of others; the sole purpose of the department being to place the anthropological collections of the exposition within reach of the largest possible number of workers and teachers.

Copies of this letter have been sent direct to a number of educational institutions and museums.

W J McGee.

SCIENTIFIC NOTES AND NEWS.

William Barton Rogers, the eminent geologist, was born on December 7, 1804, and the October number of the *Review* of the Massachusetts Institute of Technology will be largely given to a life of Rogers, dealing especially with his work in planning and founding the institute.

The Franklin Institute, Philadelphia, has awarded an Elliott Cresson Medal to James M. Dodge, of Philadelphia, for his cold storage system and to Dr. Hans Goldschmidt for his inventions in aluminothermics.

Senhor Augusto Ribeiro, head of the political department, Portuguese Colonial Office, and Dr. Don Eulogio Delgado, president of the Lima Geographical Society, have been elected honorary corresponding members of the Royal Geographical Society.

Dr. Willis R. Whitney, professor of theoretical chemistry at the Massachusetts Institute of Technology, has resigned to take charge of the research laboratories of the General Electrical Company's works at Schenectady.

Durham University has conferred the degree of D.Sc. on Mr. R. A. Sampson, F.R.S.,

professor of mathematics in the Durham College of Science.

THE daily papers state that Professor Frederick Starr, professor of anthropology at the University of Chicago, will resign and will make an extended expedition to Japan and China.

THE N. Y. *Evening Post* states that Professor E. W. Woodworth, of the department of entomology at the University of California, has for some time been studying silkworm culture on the Pacific Coast. He is trying to determine whether silkworms may be raised in California on a scale that would make their propagation a commercial success.

JAMES H. MONTGOMERY, Ph.D., vice-president of Allegheny College, Meadsville, Pa., member of the American Association, died on August 11, at the age of fifty years.

DR. JOSEPH WIENER, who came from Bohemia to New York in 1849 and was at one time professor of pathology in the College of Physicians and Surgeons, died on August 11, at the age of seventy-six years.

DR. FRIEDRICH RATZEL, professor of geography at Leipzig, well-known in this country for his important work on the geography of North America, died on August 9.

THE deaths are announced of Sir William Banks, a well-known British surgeon who took a prominent part in the work of the medical school of the University of Liverpool, where he was emeritus professor of anatomy, and of Sir Frederic Bateman, a prominent physician of Norwich, the author of works on aphasia and other subjects.

THERE will be a civil service examination on September 14 and 15 to fill a vacancy in the position of anatomist (male), at $1,600 per annum, in the Army Medical Museum, office of the surgeon-general, and other similar vacancies as they may occur.

THE committee appointed by the Texas legislature to investigate methods for the extermination of the boll weevil and pay a reward of $50,000 to the discoverer of any such method has decided that no one has earned this reward.

THE American Microscopical Society will meet at Buffalo, New York, on August 23, 24 and 25, under the presidency of Professor T. J. Burrill, of the University of Illinois. The meetings will be held in the lecture room of the Buffalo Society of Natural History, Hotel Lafayette being the headquarters. The subject of the president's address, which will be given on the evening of August 24, will be 'Microorganisms of the soil and human welfare.' Attention may be called to the fact that this meeting is the consummation of 25 years of existence and is therefore of special interest. A National Microscopical Congress, held at Indianapolis, Ind., in 1878, appointed a committee on organization, and at Buffalo, N. Y., in 1879, was founded the American Society of Microscopists, which, in 1892, became the American Microscopical Society; thus the twenty-fifth year of the society's existence ends with this meeting, the twenty-seventh if we count the meeting in Indianapolis, the twenty-sixth if we begin with the Buffalo meeting.

THE St. Marylebone Natural Science Society, London, which has been in existence for the past six years, has celebrated the opening of a new museum and lecture hall, 444 Edgware Road. The work of the society is carried out entirely by working people and is self-supporting.

A LONG vacation course which lasted till August 16, was arranged by the Oxford School of Geography, and was opened with an introductory address by Mr. H. J. Mackinder, student of Christ Church and reader in geography. According to a report in the London *Times* he said they were met together as a body of secondary and university teachers for the purpose of what he might describe as mental refreshment. It was their intention to spend the greater part of the next three weeks in the study of geography. Summer schools, of course, had their limitations, but none were more defensible than those intended for teachers. If secondary teaching was to retain its vitality, it was essential that, in the narrower subjects at any rate, there should be periodical contact between those whose daily duty it was to teach in school and those who were fortu-

nate enough to be mainly occupied in the advancement of their subject. No reading, however assiduous, could possibly replace the influence of personal intercourse. As regarded geography and education, he was delighted to tell them that real progress was being made. The lead originally given by the University of Oxford, acting in conjunction with the Royal Geographical Society, was being followed in other universities. The University of Cambridge was at this moment taking very active steps, which he trusted would meet with great success. The Universities of Liverpool and Manchester were placing economic geography under specialist teachers, in a favored position in the *curricula* of their new commercial degrees, and the University of Birmingham was following the lead of the University of London and of the London School of Economics. One thing, however, he regretted, that in the *curriculum* recently adopted by the British universities for the preparation of army candidates military topography, in the narrower sense, but not geography in the larger, had found a place. In this respect they were behind continental education. Surely, after the lessons in the Boer war, it was obvious that officers should above all things learn to think in terms of space, and in his experience this power came by the light of nature only to a very small percentage even of educated men. The whole basis of geography—and it was a thing which at this moment required saying in the light of certain tendencies in their universities—the whole basis of geography was physical. Historical and economic geography were merely empirical and unworthy of university study unless they regarded them as applications of physical geography. In fact, he claimed it as perhaps the happiest function of the subject that it should act as a link between the faculties of arts and natural science, which, owing to vested interests, were too much separated. A hybrid degree in arts and science mixed would in this twentieth century be one of the finest preparations for practical life in the world. It was grotesque that men should be regarded as educated who did not know even the modes of scientific thought. It was equally absurd that scientific students should be regarded as educated if they had not availed themselves of the teaching of the humanities, which was a legacy of the past.

UNIVERSITY AND EDUCATIONAL NEWS.

Soon after the opening of the fall term the corner stone of the new library at Stanford University will be laid. It will cost $750,000, and have a capacity of 1,000,000 books.

It is reported that Mr. Henry Phipps has given $20,000 to the Johns Hopkins University for the study of tuberculosis.

The Drapers Company of London will give £30,000 toward paying the debt on the land and buildings of University College, London, to enable the College to be incorporated in the University of London.

The St. Andrews diploma of L.L.A.—which means 'lady literate in arts'!—has been given this year on examination to 101 candidates. It appears that 1,400 papers were written and passes were obtained in 766 instances. The distribution of subjects is rather curious. Nine passed in Latin, two in Greek, two in zoology, two in natural philosophy, seventy in geography, twenty-eight in botany, seventy in physiology, etc.

Dr. W. H. Newbold, professor of philosophy in the University of Pennsylvania, has resigned the deanship of the graduate school.

Dr. Frank Allen, senior instructor in physics in Cornell University, has been appointed to a lately established professorship in physics in the University of Manitoba, Winnipeg, Canada.

In the University of London, Dr. Edward Westermarck, formerly lecturer on sociology in the University of Finland, has been appointed lecturer in sociology (in connection with the Martin White benefaction); Mr. W. Legge Symes, M.R.C.S., university demonstrator in physiology; and Miss Beatrice Edgell, M.A., Ph.D., demonstrator in experimental psychology.