plants has been bought for the department of botany, and the department of geology has bought a specimen of the teeth of the extinct shark *Edestus* from the Devonian rocks of Rhenish Prussia.

Samples of volcanic dust which fell after the recent eruptions in the Andes have been presented to the department of minerals by the proprietors of *The Times* and by Messrs. H. W. Nelson, Limited. Professor G. Vibert Douglas has collected and presented a large series of rocks illustrating the geology and mineralization of several mines in the "copper belt" of Northern Rhodesia and Katanga, and purchase has been made of a series of exceptionally fine crystals from the Tsumeb copper mines in Southwest Africa. Copper, zinc and lead minerals are represented—among them cerussite, anglesite, chessylite, smithsonite and mimetite.

THE ENGINEERING SOCIETIES LIBRARY

THE Engineering Societies Library, New York, reports that, for the first time since the depression began, inquiries are falling off. Geographically, the decrease is uniform, indicating a lessening of industrial and engineering effort in all nations.

Library readers, however, continue to increase. They were ten per cent. more numerous in 1931 than in 1930, and they are still multiplying, according to Director Harrison W. Craver. The present economic situation, while slowing up the quest of industry for technical knowledge bearing upon problems of development, has stimulated the individual engineer to greater intellectual effort.

Jobless engineers and scientific men, according to Mr. Craver, are likely, in the long run, to profit by their enforced leisure, for, during the era of prosperity which came to an end in 1929, they were so immersed in the practical aspects of the tasks that they had little opportunity to keep abreast of engineering advances in other than their own specialized fields. Hence, it is believed, one result of the economic recession will be a broadening of the outlook of the professional engineer in all countries.

"Not until recently," Mr. Craver said, "did the depression affect us at all. Last year nearly 50,000 requests to supply technical information, a record number, were received. This represents a gain of several thousand over the previous year. But now, the slump in industrial operations is being reflected in a diminished demand for investigating service at the library.

Requests for facts, nevertheless, are coming from practically every country and from every state in the Union. They cover almost the entire range of engineering, according to Julian A. Sohon, chief bibliographer.

Soviet Russia, Mr. Sohon said, frequently asks for technical advice through the office of the Amtorg in New York. American engineers working in Russia also write for assistance from time to time.

The New Zealand Government is another conspicuous source of queries, particularly with respect to public works. Many Swedish engineers also turn to the library, which, despite the low ebb of engineering activity, is developing its facilities in preparation for a great industrial era which, engineers believe, lies ahead.

The library is the largest strictly engineering library in America, and probably in the world. It now contains 128,000 volumes, 5,000 pamphlets, 6,321 maps and 3,872 searches. Alten S. Miller, of New York, is chairman of the Library Board for 1932.

FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS

THE second annual field conference of Pennsylvania geologists was held in the Lehigh Valley on May 28, 29 and 30, the geology departments of Lehigh University and Lafayette College acting as hosts. Especial mention should be made of the efficient manner in which the trips were planned and carried out, thanks to the able work of the committee in charge, consisting of D. Fraser, A. H. Fretz, B. L. Miller and L. Whitcomb, of Lehigh, and C. K. Cabeen, H. A. Itter, H. Koerner and F. Ward, of Lafayette. About 75 members and guests from outside Pennsylvania registered at Markle Hall, Lafayette College.

On the afternoon of Saturday, May 28, two field trips were offered simultaneously, the visitors choosing between them. Trip No. 1, under Professor Itter, of Lafayette, covered the three members of the Triassic System exposed along the Delaware below Easton, the well-known "Ringing Rocks" and certain exposures of the Cambrian and Pre-Cambrian. Trip No. 2 visited the cement and slate belts of the Lehigh Valley, including quarries and mills, and proved of unusual interest to the non-metallic economic geologists. It was in charge of Dr. B. L. Miller, of Lehigh University. The Saturday activities finished with an informal dinner at Easton. President W. R. Lewis extended a welcome from Lafayette College, and various members spoke very briefly upon the local geology. During a short business session the by-laws drawn up by committee were adopted. These included the appointment of a permanent secretary-treasurer, who must be a member of the Pennsylvania State Geological Survey. Dr. Bradford Willard was selected for this position.

The Sunday, May 29, trip was attended by the entire assembly. The party left Easton by automobile

and proceeded up the Delaware Valley to the Water Gap, thence to Stroudsburg, crossed to the Lehigh River, and thence traveled south to Bethlehem. The trip included visits to exposures of most of the formations from the Pre-Cambrian through the Upper Devonian beside Pleistocene deposits and various economic features such as cement, slate and metallic paint ore. The excursion was successively led by Professor Freeman Ward, of Lafayette, Dr. Bradford Willard, of the State Survey, Professor Frank Swartz, of Pennsylvania State College, and Dr. B. L. Miller, of Lehigh University. At Bethlehem dinner was served at the Hotel Bethlehem and was followed by a welcome from President C. R. Richards, of Lehigh, after which Professor H. Ries, of Cornell, spoke briefly.

On the thirtieth the conference ended in the members and guests selecting one of three trips. The first under Dr. B. L. Miller, of Lehigh, was largely devoted to metallic economic geology in that visits were made to abandoned iron pits and the old zinc mines of the Saucon Valley south of Bethlehem. The second trip, conducted by Professor Freeman Ward, of Lafayette, was devoted to a study of the glacial deposits, chiefly with a view of observing the differences between and the interrelations of the Illinoian and Wisconsin drifts. Those who selected the third trip were led by Dr. Lawrence Whitcomb, of Lehigh, to Spitzenberg, a conical hill near Lenhartsville, some thirty miles west of Bethlehem. The purpose of this visit was to inspect the peculiar limestone conglomerate which rests upon the Ordovician shale near the crest of the hill.

It is planned to hold the annual meeting of the conference for 1933 at Harrisburg as guests of the Pennsylvania Topographic and Geologic Survey. This is scheduled tentatively for the last week-end in May and will cover the Silurian-Devonian-Mississippian sections of the Susquehanna and Juniata Valleys, the Triassic and pre-Silurian Paleozoics between Harrisburg and York, including a visit to the Cornwall Iron Mines, and the river terraces, the peneplanes, and other physiographic features of the neighborhood.

BRADFORD WILLARD,
Secretary-Treasurer

THE NEANDERTAL RACE IN PALESTINE

THE discovery during the first two weeks in May of seven skeletons of the Neandertal race is destined to throw a flood of light on that particular species of fossil man. The specimens hitherto found in Europe have been so few and fragmentary that there was little evidence to suggest that the race or species might include a number of varieties. The first intimation of marked variation came with the discovery of the skull at Broken Hill, Rhodesia, some ten years ago. In 1925 Turville-Petre found a portion of the cranial cap of a Neandertal skull in the Cave of the Robbers near the Sea of Galilee. But the fragment being small (frontal and one cheek bone) gave no indication of variation from the European type.

The seven individuals just found in the Cave of the Kids near Haifa by Theodore D. McCown, field representative of the American School of Prehistoric Research and in charge of the joint excavations of the American and British Schools, will, on account of their relative completeness, throw new light not only on the species as a whole, but also point to a Palestinian variety of the Neandertal species. A tracing just received of one of the best preserved adult skulls shows that the latter agrees with the European type in the marks of a powerful musculature, massive brow ridges, taurodont dentition and prognathism. But the prognathism is confined largely to the upper jaw and the dentition. The chin can scarcely be called receding and the frontal and parietal portions of the skull are more highly developed than in the known European examples.

It is especially fortunate that these seven skeletons, as well as that of a Neandertal child found (also by McCown) in the same cave one year ago, were all *in situ* and associated with industrial remains of the Mousterian Epoch. McCown states that one of the adult skeletons was found clasping to his breast a huge jaw of the wild boar.

The skeletons were lying near the bedrock and in a stony matrix. McCown is bending every effort to remove them safely from the deposit and ship them to London in time for exhibition at the International Congress of Prehistoric and Protohistoric Sciences which meets from August 1 to 6.

GEORGE GRANT MACCURDY

SCIENTIFIC NOTES AND NEWS

THE preliminary program of the meeting of the American Association for the Advancement of Science, to be held at Syracuse, New York, from June 20 to 25, was published in the issue of SCIENCE for May 27. Some seventeen associated scientific societies will meet with the association. The first general session, followed by a reception, will be held on the evening of Monday, June 20, under the presidency of Dr. John J. Abel, professor of pharmacology, emeritus, at the Johns Hopkins University. Dr. Edward L. Thorndike, professor of educational psychology at Teachers College, Columbia University, will make the address.