oldest department of the institution, is in Evanston, about ten miles north of the business center of Chicago. The campus extends half a mile along the shores of Lake Michigan, and is well worth seeing. The important buildings on it are the main University Hall, the Orrington Lunt Library, the Dearborn Observatory, the School of Music, Science Hall, the Garrett Biblical Institute and the School of Oratory. Ground has been broken for the buildings to house the new Department of Engineering, from which much is expected.

Northwestern University Building is a large six-story structure in the center of the business district of Chicago, in which are located the Schools of Law, Dentistry and Pharmacy. These departments are remarkably well equipped, and in reputation rank second to none in the country. The library of the law school is worth a visit, not only because of its collections of books, but also on account of the unique construction.

The Medical School is located on Dearborn street between 24th and 25th, in the vicinity of the important hospitals, Mercy and Wesley. The medical school is well known throughout the country on account of the position it took years ago on the question of graded medical instruction, and required laboratory work, and with the general advance has maintained its relative rank. This department is easily reached by the state street cars from down town.

THE UNIVERSITY OF CHICAGO

To American men of science the University of Berlin, the University of Leipzig, or the University of Munich connotes no collection of buildings but the published writings of men who in the laboratories of these institutions have achieved their results. To Europeans the name of the University of Chicago suggests, not high-raised battlements and towers, but the men who there carry on their scientific work. Those attending the exercises of convocation week, knowing the university as do the Europeans, will be interested also in observing the habitat of these men whose work they know.

As one stands at the west end of the Midway Plaisance and looks eastward almost a mile he sees to the north and the south of this beautiful thoroughfare the campus of the university; north, there confronts him the earliest building, Cobb Hall and the dormitories straggling to the south of it. Cobb is a recitation building housing the classical departmental libraries and the library of the modern language group, as well as most of the administrative offices and an information office. East of Cobb is Haskell Oriental Museum, on the top floor of which there is the library of the Divinity School; on the second floor, some valuable Oriental collections, including those in Biblical history, Comparative Religion, Assyrian and Egyptian life, and the work of the Oriental Exploration; on the first floor, the faculty room and the office of the president. As one leaves the east door of Haskell he gazes upon the tall windows of the Law Building, a structure modeled somewhat on the King's College Chapel at Cambridge, though the mitre-like towers are somewhat shortened and the buttresses lack the graceful English finials. The first floor of the Law Building is given over to large lecture rooms, to be used for many of the section meetings. Up the massive stairway one goes to the great reading room, a hall with high timbered ceiling, 160 feet long and 50 feet wide. South of the Law Building and Haskell will be erected the William Rainey Harper Memorial Library, extending with its two wings from the men's halls on the west to the women's halls on the east. Those interested in the housing of women in the university will do well to call for a moment at Nancy Foster Hall, the most southerly of the four women's halls, before passing north of the women's quadrangle to Walker Museum. As one stands in front of Walker he can see immediately to the east the Quadrangle Club at the corner of Fifty-eighth and Lexington, and just south of it a temporary recitation building for women called Lexington Hall wherein luncheon will be served during the convocation. Two blocks to the east are the structures of the School of Education, including the University High School, the University Elementary School, and the College of Education. Here, too, some of the meetings will be held and here likewise luncheon can be secured. Westward beyond Cobb Hall one sees a structure like Lexington Hall erected as a temporary recitation building for men. Here may be found the campus headquarters of the Astronomical Department though the departmental library is in Ryerson Laboratory. Just north of Ellis stands at the corner of Ellis and Fifty-eighth a red-brick structure, the Press Building. Here for the present are the business offices, the general library and the university press. The last-named division of the university has charge of all printing and publishing for the institution and of the purchase and distribution of books and supplies. The list of published books numbers about 375. Last year thirty-three books were issued. Fourteen journals are printed at regular intervals. The function of the press and the attitude of the university toward the same are things worthy of attention. And beyond the Press Building is the power house whence come the heat and light and filtered water for all of the thirty-odd structures.

Having taken this survey of a miscellaneous group of buildings of minor importance to scientists the visitor will desire to enter the building where Professor Chamberlin and his colleagues do their work. The collections in Walker are estimated to embrace over one million specimens, including the general geological, the anthropological, and the paleontological collections. The general geological collection contains material illustrating structural phenomena, fossils, geographical material, economic geology, mineralogy and petrography. In addition to the anthropological collection of ethnographic archeologic material there are the Ryerson collections in Mexican archeology and from the cliff-dwellings and cave houses of Utah, the Clement collection from Japan, and the material collected by Professor Starr among the Ainu of Japan and the native tribes of the Congo Free State. The paleontological collection of invertebrates contains a large amount of material, especially from the

Paleozoic horizons. Here also are the collections of Hall, Gurley, James, Washburn, Krantz, Weller, Sampson, Faber, Bassler and Van Horne. The collection of vertebrate fossils includes extensive series of the American Permian reptiles, Triassic reptiles and amphibians, Niobrara Cretaceous birds, reptiles and fishes, with a considerable material from the Laramie Cretaceous and White River Oligocene.

Across the campus are the first two laboratories erected. Kent Chemical Laboratory was erected in 1893. The basement contains a furnace room for crucible work, muffle work, tube-heating, and other purposes; a constant temperature room, a room fitted with steam and other appliances for work on a large scale. a mechanical workshop, and storage-rooms. On the first floor are one small and two large lecture rooms, and a large lecture hall seating three hundred persons, fitted for use as a chemical lecture room, if desired. This floor also contains a chemical museum, a large private laboratory, a room with northern exposure, especially fitted for use as a gasanalysis laboratory, and also apparatus and preparation rooms connected with the lecture rooms. On the second floor are two large laboratories for research and quantitative analysis; three private laboratories for the professors; balance, combustion, and airfurnace rooms; a balcony for out-of-door work; and the chemical library. On the third floor are three laboratories for general and analytical chemistry, a storeroom, a preparation room, a room especially fitted for optical and photographic work, a balance room, and two private laboratories.

East of Kent is the Ryerson Physical Laboratory. The central part of the fourth floor forms a hall for experiments requiring a large space. The roof above this portion is flat and suitable for observations in the open air. The third floor is devoted to a general laboratory for the undergraduate work in general physics, which with its adjoining apparatus and preparation rooms occupies the entire floor of the east wing. On the same floor are found two general laboratories and class rooms. On the second floor are found a large

general laboratory for advanced undergraduate work, optical laboratories, a chemical laboratory, a large dark-room, two developing rooms, and the large lecture hall with its adjoining apparatus and preparation rooms. The first floor is devoted to laboratories for research. Two large constant temperature rooms and the mechanician's room where all tools and appliances necessary in the construction or repair of physical apparatus are stored are here. In the small room in the southeast corner Michelson carried on the experiments which have won for himself and American scholarship the great honor of the Nobel prize.

As one passes north between Kent and Ryerson he enters Hull Court surrounded from left to right by the Physiology, Anatomy, Zoology and Botany Buildings. In the first Loeb and Stewart did their work; in the second, Barker and Donaldson and Herrick; in the Zoology Building, Whitman and his colleagues; and in the structure to the right, Coulter and the other botany men make use of the material from as near at hand as in the pond beside their windows or from as far away as Mexico, the Yukon and Java. Hull Court is the center for the men preparing to take up medicine. Here is found the effort to link the work of the medical college to that of the university in the way so forcefully advocated by the retiring president of the association.

As one passes through Hull Court he will do well to turn for a moment to the west and look at least into the library of Hitchcock Hall, one of the men's dormitories, before passing eastward to Hutchinson Court and the magnificent Tower Group of buildings. The rich interior of the Leon Mandel Assembly Hall will become familiar to all attending the general meetings of the association. The Reynolds Club, reminding one somewhat of St. John's at Oxford, is entered from the cloister. On the first floor, north of the elaborate Elizabethan stairway, is the library; to the south, the billiard room. the second floor, in addition to several committee rooms, is a large reception room. the third floor, in addition to other committee rooms, is a small theater with trusses of open timber and an interesting stage curtain representing a fête day in a medieval town. These decorations, indeed, all the decorations in the Tower Group, are by Mr. Frederick Bartlett, of Chicago. The basement contains bowling alleys and a barber shop. The Reynolds Club serves that function in the University of Chicago which the Houston Club serves at Pennsylvania and the Union at Harvard. Hutchinson Hall is a replica of Christ Church Hall at Oxford. The main entrance is through a large arch at the base of the tower. The great room is forty feet wide, one hundred and fifteen feet in length. About the oak wainscoting with its series of shields of British and American Universities rise delicately traceried windows and, higher still, at least fifty feet from the floor, are magnificent trusses of open timber work from which hang beautiful pendant lanterns of oak decorated in red, blue and gold. At the west end of the room hang the portraits of the founder of the university, a picture by Eastman Johnson; of President Harper, a portrait painted by Gari Melchers; and the President of the Board of Trustees, Martin A. Ryerson, a painting by Lawton S. Parker. On the south wall are a small portrait of Silas Cobb and a picture by Frederick Vinton of Professor Galusha Anderson. At the east end of the room hangs a picture of the first head of the History Department, Professor von Holtz, painted by Karl Marrof Münich. On the north wall is a likeness of the president of the university, painted by Lawton Parker. Leaving the tower one will desire to look into the Frank Dickinson Bartlett Gymnasium, particularly at the mural decorations by the brother of the young man for whom the building is named, the window presented in his memory by Mr. William G. Hibbard of his father's firm, and the large exercising floor of the gymnasium.

After one has surveyed the many buildings of the university and at the gymnasium stands thinking of the material resources of the institution, of the fact that although most of the \$27,590,994 was the contribution of one man, the citizens of a sister city, twenty-three

of the twenty-eight permanent buildings were presented by citizens of Chicago, and the number of donors is upwards of 3,000, most of them Chicagoans, he should realize on looking south toward the Chicago copy of the Magdalen Tower, the beautiful edifice whence soon will ring the chimes in memory of the gracious first Dean of Women, Alice Freeman Palmer, that a genuine appreciation of the men who make the connotation for the buildings possesses the singer of the university song:

The City White hath fled the earth, But where the azure waters lie, A nobler city hath its birth, The City Gray that ne'er shall die. For decades and for centuries, Its battlemented tow'rs shall rise, Beneath the hope-filled western skies, 'Tis our dear Alma Mater.

DAVID A. ROBERTSON

University of Chicago.

$\begin{array}{c} LOCAL \ ARRANGEMENTS \ FOR \ THE \ CHICAGO \\ MEETING \end{array}$

To those who intend attending the fiftyeighth meeting of the American Association for the Advancement of Science at Chicago, from December 30 to January 4, and have never been in the City-of-the-Lake, it may be well to mention that Chicago does not lie at the southern extremity of Lake Michigan, as many maps indicate, but on its western shore; and that therefore to become properly oriented in the city one should remember that the lake lies to the east, not to the north. To those who were so fortunate as to be able to visit the great world's fair it will be sufficient to state that the campus of the University of Chicago, the meeting place, lies on the north side of the Midway Plaisance at about the center of The Midway is now returned to its former estate, that of a broad parkway uniting Jackson Park, in which the fair was held, to Washington Park, a mile to the west.

It is the aim of the local committee of the association to locate the meeting places, both of the various sections of the association and of the affiliating societies, as contiguous as possible, in order that no time may be lost nor confusion occur. To this end the university has placed all its lecture halls in the various

buildings at the disposal of the association, and provision has been made whereby those in attendance at the meeting may secure luncheon without leaving the compus.

While the Auditorium Annex will be the headquarters of the association, it may be suggested for the information of those who may wish hotel accommodation near the campus that the Del Prado Hotel, Fifty-ninth Street-Madison Avenue and the Midway (60th Street Station, Illinois Central R. R.) adjoins the campus on its eastern end; the Windermere Hotel (57th Street Station, Illinois Central R. R.) is at the north end of Jackson Park within easy walking distance; and the Chicago Beach Hotel (50th Street Station, Illinois Central R. R.), while somewhat farther away on the lake shore north of Jackson Park, is still within fair distance of the university. Those who intend locating in the city itself will find hotels and rates detailed on page 15 of the Preliminary Announcement of the meeting. They will note that the readiest method of reaching the meeting place will be viâ the Illinois Central Suburban Railway from the station on the Lake Front nearly opposite the Auditorium and Annex Hotels, on Michigan Avenue. trains are frequent, the expresses making the run south to Fifty-seventh Street in twelve minutes. On arriving at this station (the second stop of the express trains) the lake and the Field Museum of Natural History will be in view to the east and the tower of the university to the west. Leave the station in the direction the train continues and on reaching the exit turn to the right. A 'bus may be taken to the campus or the short distance walked in a few minutes. The main entrance to the tower arcade, directly beneath the tower itself, brings the visitor immediately to the registration desk, the information bureau and the general headquarters of the association, from which each of the halls of meeting may be readily reached.

SCIENTIFIC NOTES AND NEWS

In accordance with the desire of the Royal Society, Lord Kelvin was buried in West-